



Request for Proposal 09-X-20188

For: Traffic Signals, Poles, Controls & Electrical Equipment for NJDOT

Event	Date	Time
Bidder's Electronic Question Due Date (Refer to <u>RFP Section 1.3.1</u> for more information.)	9/25/08	5:00 PM
Mandatory Pre-bid Conference	N/A	
Mandatory Site Visit	N/A	
Bid Submission Due Date (Refer to <u>RFP Section 1.3.2</u> for more information.)	10/10/08	2:00 PM

Dates are subject to change. All changes will be reflected in Addenda to the RFP posted on the Division of Purchase and Property website.

Small Business Set-Aside (Refer to <u>RFP Section 4.4.2.2</u> for more information.)	<input checked="" type="checkbox"/> Not Applicable	Category <input type="checkbox"/> I
	<input type="checkbox"/> Entire Contract	<input type="checkbox"/> II
	<input type="checkbox"/> Partial Contract	<input type="checkbox"/> III
	<input type="checkbox"/> Subcontracting Only	

RFP Issued By

State of New Jersey
Department of the Treasury
Division of Purchase and Property
Trenton, New Jersey 08625-0230

Using Agency

State of New Jersey
Department of Transportation
Cooperative Purchasing Program Partners

Date: August 26, 2008

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1.0 INFORMATION FOR BIDDERS

1.1 PURPOSE AND INTENT

This Request for Proposal (RFP) is issued by the Purchase Bureau, Division of Purchase and Property, Department of the Treasury on behalf of the Department of Transportation. The purpose of this RFP is to solicit bid proposals for Traffic: Signals, Poles, Controls and Electrical Equipment.

The intent of this RFP is to award contracts to those responsible bidders whose bid proposals, conforming to this RFP are most advantageous to the State, price and other factors considered. However, the State reserves the right to separately procure individual requirements that are the subject of the contract during the contract term, when deemed by the Director to be in the State's best interest.

The NJ Standard Terms and Conditions version 07/27/07 will apply to all contracts or purchase agreements made with the State of New Jersey. These terms are in addition to the terms and conditions set forth in this RFP and should be read in conjunction with them unless the RFP specifically indicates otherwise.

The State intends to extend the contract[s] awarded to the Purchase Bureau's cooperative purchasing partners. These partners include quasi-state agencies, counties, municipalities, school districts, volunteer fire departments, first aid squads, independent institutions of higher learning, County colleges and State colleges. Although the State, with the assent of the vendor(s), is making the use of any contract resulting from this RFP available to non-State Agencies, the State makes no representation as to the acceptability of any State RFP terms and conditions under the Local Public Contracts Law or any other enabling statute or regulation.

1.2 BACKGROUND

This is a reprourement of the **TRAFFIC: SIGNALS, POLES, CONTROL & ELECTRICAL EQUIPMENT** term contract, presently due to expire on **October 31, 2008**. Bidders who are interested in the current contract specifications and pricing information may review the current contract T#1529 at <http://www.state.nj.us/treasury/purchase/contracts.htm>.

1.3 KEY EVENTS

1.3.1 ELECTRONIC QUESTION AND ANSWER PERIOD

The Purchase Bureau will accept questions and inquiries from all potential bidders electronically via web form. To submit a question, please go to Current Bid Opportunities webpage or to <http://ebid.nj.gov/QA.aspx>

Questions should be directly tied to the RFP and asked in consecutive order, from beginning to end, following the organization of the RFP. Each question should begin by referencing the RFP page number and section number to which it relates.

Bidders are not to contact the Using Agency directly, in person, by telephone or by email, concerning this RFP.

The cut-off date for electronic questions and inquiries relating to this RFP is indicated on the cover sheet. Addenda to this RFP, if any, will be posted on the Purchase Bureau website after the cut-off date (see Section 1.4.1. of this RFP for further information.)

1.3.2 SUBMISSION OF BID PROPOSAL

In order to be considered for award, the bid proposal must be received by the Purchase Bureau of the Division of Purchase and Property at the appropriate location by the required time. **ANY BID PROPOSAL NOT RECEIVED ON TIME AT THE LOCATION INDICATED BELOW WILL BE REJECTED. THE DATE AND TIME IS INDICATED ON THE COVER SHEET. THE LOCATION IS AS FOLLOWS:**

BID RECEIVING ROOM - 9TH FLOOR
PURCHASE BUREAU
DIVISION OF PURCHASE AND PROPERTY
DEPARTMENT OF THE TREASURY
33 WEST STATE STREET, P.O. BOX 230
TRENTON, NJ 08625-0230

Directions to the Purchase Bureau can be found at the following web address:
<http://www.state.nj.us/treasury/purchase/directions.htm>.

Note: Bidders using USPS Regular or Express mail services should allow additional time since USPS mail deliveries are not delivered directly to the Purchase Bureau.

Procedural inquiries on this RFP may be directed to RFP.procedures@treas.state.nj.us. This e-mail address may also be used to submit requests to review bid documents. The State will not respond to substantive questions related to the RFP or any other contract via this e-mail address.

To submit an RFP or contract related question, go to the Current Bidding Opportunities webpage or to <http://ebid.nj.gov/QA.aspx>.

1.4 ADDITIONAL INFORMATION

1.4.1 ADDENDA: REVISIONS TO THIS RFP

In the event that it becomes necessary to clarify or revise this RFP, such clarification or revision will be by addendum. Any addendum to this RFP will become part of this RFP and part of any contract awarded as a result of this RFP.

ALL RFP ADDENDA WILL BE ISSUED ON THE DIVISION OF PURCHASE AND PROPERTY WEB SITE. TO ACCESS ADDENDA, SELECT THE BID NUMBER ON THE BIDDING OPPORTUNITIES WEB PAGE AT THE FOLLOWING ADDRESS:

[HTTP://WWW.STATE.NJ.US/TREASURY/PURCHASE/BID/SUMMARY/BID.SHTML](http://www.state.nj.us/treasury/purchase/bid/summary/bid.shtml).

There are no designated dates for release of addenda. Therefore interested bidders should check the Purchase Bureau "Bidding Opportunities" website on a daily basis from time of RFP issuance through bid opening.

It is the sole responsibility of the bidder to be knowledgeable of all addenda related to this procurement.

1.4.2 BIDDER RESPONSIBILITY

The bidder assumes sole responsibility for the complete effort required in submitting a bid proposal in response to this RFP. No special consideration will be given after bid proposals are opened because of a bidder's failure to be knowledgeable as to all of the requirements of this RFP.

1.4.3 COST LIABILITY

The State assumes no responsibility and bears no liability for costs incurred by a bidder in the preparation and submittal of a bid proposal in response to this RFP.

1.4.4 CONTENTS OF BID PROPOSAL

Subsequent to bid opening, all information submitted by bidders in response to the bid solicitation is considered public information, except as may be exempted from public disclosure by the Open Public Records Act, N.J.S.A. 47:1A-1 et seq., and the common law. If the State proposes to negotiate and/or pursue a Best and Final Offer, bid proposals will not be made public until the Letter of Intent to Award is issued.

A bidder may designate specific information as not subject to disclosure when the bidder has a good faith legal/factual basis for such assertion. The State reserves the right to make the determination and will advise the bidder accordingly. The location in the bid proposal of any such designation should be clearly stated in a cover letter. **The State will not honor any attempt by a bidder either to designate its entire bid proposal as proprietary and/or to claim copyright protection for its entire proposal.**

By signing the cover sheet of this RFP, the bidder waives any claims of copyright protection set forth within the manufacturer's price list and/or catalogs. The price lists and/or catalogs must be accessible to State using agencies and cooperative purchasing partners and thus have to be made public to allow all eligible purchasing entities access to the pricing information.

All bid proposals, with the exception of information determined by the State or the Court to be proprietary, are available for public inspection. Interested parties can make an appointment with the Purchase Bureau to inspect bid proposals received in response to this RFP.

1.4.5 PRICE ALTERATION

Bid prices must be typed or written in ink. Any price change (including "white-outs") must be initialed. Failure to initial price changes shall preclude a contract award from being made to the bidder.

1.4.6 BID ERRORS

In accordance with N.J.A.C. 17:12-1.22, "Bid Errors," a bidder may withdraw its bid as follows:

A bidder may request that its bid be withdrawn prior to bid opening. Such request must be made, in writing, to the Supervisor of the Business Unit. If the request is granted, the bidder may submit a revised bid as long as the bid is received prior to the announced date and time for bid opening and at the place specified.

If, after bid opening but before contract award, a bidder discovers an error in its proposal, the bidder may make written request to the Supervisor of the Business Unit for authorization to withdraw its proposal from consideration for award. Evidence of the bidder's good faith in making this request shall be used in making the determination. The factors that will be considered are that the mistake is so significant that to enforce the contract resulting from the

proposal would be unconscionable; that the mistake relates to a material feature of the contract; that the mistake occurred notwithstanding the bidder's exercise of reasonable care; and that the State will not be significantly prejudiced by granting the withdrawal of the proposal. Note: a PB-36 complaint form may be filed and forwarded to the Division's Contract Compliance and Audit Unit (CCAU) for handling. A record of the complaint will also be maintained in the Division's vendor performance file for evaluation of future bids submitted.

All bid withdrawal requests must include the bid identification number and the final bid opening date and sent to the following address:

Department of the Treasury
Purchase Bureau, PO Box 230
33 West State Street – 9th Floor
Trenton, New Jersey 08625-0230
Attention: Supervisor, Business Unit

If during a bid evaluation process, an obvious pricing error made by a potential contract awardee is found, the Director shall issue written notice to the bidder. The bidder will have five days after receipt of the notice to confirm its pricing. If the vendor fails to respond, its bid shall be considered withdrawn, and no further consideration shall be given it.

If it is discovered that there is an arithmetic disparity between the unit price and the total extended price, the unit price shall prevail. If there is any other ambiguity in the pricing other than a disparity between the unit price and extended price and the bidder's intention is not readily discernible from other parts of the bid proposal, the Director may seek clarification from the bidder to ascertain the true intent of the bid.

1.4.7 JOINT VENTURE

If a joint venture is submitting a bid proposal, the agreement between the parties relating to such joint venture should be submitted with the joint venture's bid proposal. Authorized signatories from each party comprising the joint venture must sign the bid proposal. A separate Ownership Disclosure Form, Disclosure of Investigations and Actions Involving Bidder, Affirmative Action Employee Information Report, MacBride Principles Certification, and Business Registration or Interim Registration must be supplied for each party to a joint venture.

1.5 PRICE LIST AND/OR CATALOG PRICING

The bidder's signature guarantees that prices set forth within the manufacturer's preprinted price lists and/or catalogs will govern for the period of the contract. The bidder also acknowledges that, notwithstanding any reference to price escalation clauses, FOB shipping point, and shipping charges contained in the preprinted price lists, catalogs, and/or literature, such references will not be part of any State contract awarded as a result of this RFP.

2.0 DEFINITIONS

2.1 GENERAL DEFINITIONS

The following definitions will be part of any contract awarded or order placed as result of this RFP.

Addendum - Written clarification or revision to this RFP issued by the Purchase Bureau.

Amendment - A change in the scope of work to be performed by the contractor after contract award. An amendment is not effective until signed by the Director, Division of Purchase and Property or his/her designee.

Bidder – A vendor submitting a bid proposal in response to this RFP.

Contract - This RFP, any addendum to this RFP, the bidder's bid proposal submitted in response to this RFP and the Division's Notice of Acceptance.

Contractor - The contractor is the bidder awarded a contract.

Director - Director, Division of Purchase and Property, Department of the Treasury. By statutory authority, the Director is the chief contracting officer for the State of New Jersey.

Division - The Division of Purchase and Property.

Joint Venture – A business undertaking by two or more entities to share risk and responsibility for a specific project.

May - Denotes that which is permissible, but not mandatory.

Request for Proposal (RFP) - This document, which establishes the bidding and contract requirements and solicits bid proposals to meet the purchase needs of [the] Using Agency[ies], as identified herein.

Shall or Must - Denotes that which is a mandatory requirement.

Should - Denotes that which is recommended, but not mandatory.

State - State of New Jersey

Using Agency[ies]- The entity[ies] for which the Division has issued this RFP.

2.2 CONTRACT SPECIFIC DEFINITIONS

MUTCD - Manual on Uniform Traffic Control Devices

ITE - Institute of Transportation Engineers

NEMA - National Electrical Manufacturer's Association

LED – Light Emitting Diode

UPS – Uninterruptible Power Supply

PMM – Power Management Module

PIM – Power Interface Module

ADA - Americans with Disabilities Act

3.0 COMMODITY DESCRIPTION/SCOPE OF WORK

TECHNICAL SPECIFICATIONS

3.1 CATEGORIES

The following categories of traffic component parts are covered under this RFP:

Section	Category	Items #
Section A	Traffic signal indications/parts	1 - 6
Section B	Traffic signal hangers/brackets	7 - 23
Section C	Traffic signal poles, arms, bases	24 - 43
Section D	Lighting poles, arms, bases	44 - 49
Section E	Steel traffic signal poles and arms	50 - 62
Section F	Cabinets and cabinet hardware	63 - 72
Section G	Signs/sign brackets	73 - 77
Section H	Signal control devices	78 - 88
Section I	Miscellaneous signal products/devices	89 - 99
Section J	Traffic Signal Cable	100-104

3.2 GENERAL REQUIREMENTS

All price line items reference D.O.T. specification/drawing numbers. These specification/drawing numbers are issued by the N.J.D.O.T., Bureau of Electrical Engineering dated July 1, 2001 or as noted otherwise on the price line items listed on the price sheets. Specifications and/or drawings listed in this RFP are available from Mr. Dan Black (609-530-5383) upon request. Attachment #1 for sketches referenced on the price pages for this RFP is listed with document download for this RFP.

All material must meet every requirement of the RFP specifications and any other specifications and/or sketches and/or drawings and/or manufacturer part numbers which are referred to in this RFP. Exceptions will not be permitted.

For price line items that must meet the requirements/specification of a particular manufacturers model number, the State alone shall decide if the item submitted is an approved equal.

3.3 TECHNICAL SPECIFICATIONS

In addition to meeting the drawings, sketches and specifications referenced in this RFP, the following additional requirements for items as noted must be met.

3.3.1 SECTION A (SIGNAL HEADS 8 INCH AND 12 INCH) PRICE LINES 00001 - 00006

SPECIFICATIONS FOR ADJUSTABLE FACE VEHICLE TRAFFIC CONTROL POLYCARBONATE SIGNAL HEAD (HOUSING ONLY)

The intent and purpose of the following specifications is to describe the minimum acceptable requirements for Adjustable Face Vehicle Traffic Control Polycarbonate Signal Head (Housing Only).

New Jersey Department of Transportation Specifications for Adjustable Face Vehicle Traffic Control Polycarbonate Signal Head (Housing Only).

NJ Specification No. BME-TS-HEAD (dated April 26, 2007) PRICE LINES 00002 - 00003
GENERAL - I

- 1-1 Vehicle traffic control heads shall conform to the following:
- A. Manual on Uniform Traffic Control Devices (MUTCD)
 - B. Adjustable Face Vehicle Traffic Control Head Standard
Institute of Transportation Engineers (ITE)
 - C. Standard Publication No. TS 1
National Electrical Manufacturer's Association (NEMA)

CONSTRUCTION - II

- 2-1 Traffic signal heads shall allow the installation of LED modules without any modification to the signal head.
- 2-2 Traffic signal heads shall be a combination of signal faces of 8 inch or 12 inch signal sections as specified on the contract documents (or bid documents).
- 2-3 The housing of each section shall be a one-piece molded, ultraviolet and heat stabilized, flame retardant, permanently colored polycarbonate unit. The thickness of the housing shall be a minimum of .090 inches thick. All sections shall be identical and interchangeable with each other and shall be so designed that they interlock with each other forming a weatherproof assembly. Hinges or lugs shall be located inside each section for attaching the reflector assembly.
- 2-4 The housing door of each section shall be a one-piece, molded, ultraviolet and heat stabilized, flame retardant, permanently colored polycarbonate unit with an opening of sufficient diameter to accommodate the lens. On one side of the door, at top and bottom, there shall be a hinge so as to insure perfect alignment of the door. On the opposite side of the door, there shall be a wing nut assembly locking device to insure even gasket pressure. Twelve (12) inch signal sections shall be secured with two wing nut assemblies. Hinge pins and locking device shall be stainless steel.
- 2-5 The polycarbonate visors shall be twist or screw-on type and shall be 8 inch long open-bottom tunnel type for 8 inch heads and 10 inch long, tunnel type for 12 inch heads. Visor shall be tilted downward 7 degrees from horizontal.
- 2-6 The color shall be highway yellow matching to FED-STD-595B color #13538. The inside surface of the visor shall be a dull non-reflective black.
- 2-7 The top and bottom of the section shall be provided with positive interlocking and indexing ring integral with the section. The integral locking ring shall consist of a single solid or double ring with 72 teeth and a minimum width of 1/4 inch. Openings in top and bottom of the section(s) shall accommodate 1-1/2 inch standard pipe nipples.
- 2-8 All screws, washers, nuts and bolts shall be stainless steel. All components shall be readily accessible when the door is opened. Maintenance and/or replacement of components shall be done using standard tools.

ELECTRICAL - III

- 3-1 Each signal head shall be equipped with a barrier-type terminal block providing separate screws for each signal section and neutral wires. For all multi-section signal heads, the terminal block shall be installed in the section with the yellow module. Each signal section shall be wired complete to the terminal block with color coded using spade lugs.

INSTRUCTIONS AND GUARANTEE - IV

- 4-1 Upon request, one wiring diagram and installation manual shall be provided with each signal face.
- 4-2 No changes or substitutions in these requirements will be accepted unless authorized in writing by the Director.
- 4-3 The signal face shall carry a one year guarantee from the date of delivery against any imperfections in workmanship and material.

SPECIFICATIONS FOR ADJUSTABLE FACE HAND/MAN POLYCARBONATE SIGNAL HEAD (HOUSING ONLY) Price line 00004

N.J. Specification No. BME-TS-HAND/MAN

Effective Date: April 26, 2007

New Jersey Department of Transportation Specifications for Adjustable Face HAND/MAN traffic control Polycarbonate Signal Head (Housing Only).

The purpose of these specifications is to describe minimum acceptable requirements for Adjustable Face Hand/Man traffic control Polycarbonate Signal Head (Housing Only).

GENERAL - I

- 1-1 Hand/Man traffic control heads shall conform to the following:
- A. Manual on Uniform Traffic Control Devices (MUTCD)
 - B. Adjustable Face Vehicle Traffic Control Head Standard
Institute of Transportation Engineers (ITE)
 - C. Standard Publication No. TS 1
National Electrical Manufacturer's Association (NEMA)

CONSTRUCTION - II

- 2-1 Hand/Man traffic signal heads shall allow the installation of LED modules without any modification to the signal head.
- 2-2 The housing section shall be a one-piece molded, ultraviolet and heat stabilized, flame retardant, permanently colored polycarbonate unit. The thickness of the housing shall be a minimum of .090 inches thick.

- 2-3 The housing door shall be a one-piece, molded, ultraviolet and heat stabilized, flame retardant, permanently colored polycarbonate unit with an opening of sufficient diameter to accommodate the lens. On one side of the door, at top and bottom, there shall be a hinge so as to insure perfect alignment of the door. On the opposite side of the door, there shall be a wing nut assembly locking device to insure even gasket pressure. Hinge pins and locking device shall be stainless steel.
- 2-4 The color shall be highway yellow matching to FED-STD-595B color #13538. The inside surface of the visor shall be a dull non-reflective black.
- 2-5 The top and bottom of the housing section shall be provided with positive interlocking and indexing ring integral with the section. The integral locking ring shall consist of a single solid or double ring with 72 teeth and a minimum width of 1/4 inch. Openings in top and bottom of the section(s) shall accommodate 1-1/2 inch standard pipe nipples.
- 2-6 All screws, washers, nuts and bolts shall be stainless steel. All components shall be readily accessible when the door is opened. Maintenance and/or replacement of components shall be done using standard tools.

ELECTRICAL - III

- 3-1 Each signal head shall be equipped with a barrier-type terminal block providing separate screws for the Hand/Man and neutral wires and shall be wired complete to the terminal block with color coded using spade lugs.

INSTRUCTIONS AND GUARANTEE - IV

- 4-1 Upon request, one wiring diagram and installation manual shall be provided with each signal face.
- 4-2 No changes or substitutions in these requirements will be accepted unless authorized in writing by the Director.
- 4-3 The signal face shall carry a one year guarantee from the date of delivery against any imperfections in workmanship and material.

3.3.1.1 TRAFFIC SIGNAL INDICATION PARTS: 3M R.A.G. (3 SECTION – 12") (PRICE LINE 00005)

Specifications are described in the NJDOT spec drawing EB-TS-2, which can be located on the NJDOT website at <http://www.state.nj.us/transportation/eng/elec/TSS/english/>

3.3.1.2 TRAFFIC SIGNAL INDICATION PARTS: 3M – ARROW (1 SECTION) (PRICE LINE 00006)

Specifications are described in the NJDOT spec drawing EB-TS-2; Section G, which can be located on the NJDOT website at <http://www.state.nj.us/transportation/eng/elec/TSS/english/>

3.3.2 SECTION B (TRAFFIC SIGNAL HANGERS/BRACKETS) PRICE LINES 00007 - 00023

3.3.2.1 The item safety chain shall consist of the following:

- a. *42" long 1/4" hot dipped galvanized coil proof straight link chain.*
- b. *1 - 5/16" x 2-1/2" long stainless steel hex head bolt.*

- c. 2 - 5/16" stainless steel hex nut.
- d. 2 - 5/16" stainless steel flat washers.
- e. 1 - 5/16" stainless steel lock washer.

The safety chain must be supplied and shipped as a complete unit with the bolt, washers and nuts secured through the safety chain.

3.3.2.2 For the items pedestrian clamp assemblies (7-1/2" diameter pole and 9-1/2" diameter pole), drawing T-0601, the following three items are changed on the pedestrian clamp list of materials:

Description	Material	No. Required
Plain Clamp	Alum. 356-T4	2
Outlet Clamp	Alum. 356-T4	2
90 Serrated Elbow	Alum. 356-T4	2

All other requirements from the list of materials and drawing T-0601 still apply.

3.3.2.3 For the items two-way, three-way and four-way bracket assemblies, the T-bar assembly shall not be supplied as an alternative for any bottom or top spider.

3.3.2.4 For the item pole clamp assembly-hinge strap type, the pole clamp assembly must be supplied completely assembled ready for mounting on a standard Type "K" traffic signal pole. The assembly shall consist of all items noted in the hinge strap list of materials for mounting a single (one-way) traffic signal indication.

3.3.2.5 All standard 1-1/2" nipples provided, as part of any item under this contract must be 8 inches long.

3.3.2.6 One (1) serrated positioning ring shall be provided with each universal joint and wire outlet in addition to all other material and requirements as detailed on drawing # T-0401.

3.3.2.7 The offset sign bracket shall include all items indicated on Sketch #3 except the stiffener. The stiffener shall **not** be provided as part of this item. The support pipe (Item #3) on Sketch #3 shall be provided for a 48" sign.

The State reserves the right to order different support pipe lengths as long as the average length of the support pipe for a particular order is 42 inches or shorter. For example, the State can order 5 offset sign brackets for 60" signs and 5 offset brackets for 36" signs at the unit cost bid by the supplier for this item.

3.3.3 SECTION C (TRAFFIC SIGNAL POLES, ARMS, BASES) PRICE LINES 00024 - 00043

3.3.3.1 For items bases (Type TB-2, HHB, transformer (lighting) and K base) a plastic transformer base door must be supplied. (sketch # 14)

3.3.3.2 Pole Identification

- a. For items traffic signal pole (Type T, Type C and Type K) and for traffic signal standard, Type\ KE, the following tag identification must be utilized:

1) An identification tag shall be welded on the inside of the pole 3 - 5 inches from the base. The tag shall be welded upside down so that the lettering "N.J.D.O.T." is not visible but instead facing into the pole.

b. For items pedestal pole (8 foot and 12 foot) the following tag identification must be provided:

(1) An identification tag shall be welded on the inside of the pole 3 - 5 inches from the base's end. The tag shall be welded upside down so that the lettering "N.J.D.O.T." is not visible but instead facing into the pole.

c. For items traffic signal mast arm (Trombone 15 foot, Trombone 20 foot, 15 foot, 20 foot, 15 foot Type K, 20 foot Type K and 25 foot Type K) the following tag identification must be provided:

(1) An identification tag shall be welded on the to member of the arm, 3 - 5 inches away from the weld of the clamp assembly. The tag shall be welded upside down so that the lettering "N.J.D.O.T." is not visible but instead facing into the pole.

3.3.3.3 Tag Identification

a. *Tag construction*

(1) The tag shall be manufactured from an aluminum alloy #6063-T6. The dimensions shall be 2-1/2 inches in length, 3/4 inches in width and 1/8 inches thick. The lettering shall be 1/4 inches with "NJDOT" indented in the center of the tag.

b. *Verification By The Agency*

(1) If improper identification is discovered after the poles are delivered to the agency, the contractor will be held responsible. Payment will not be processed until the manufacturer properly tags and identifies the material at his own expense per these specifications. The agency will hold the supplier responsible for the entire shipment even if only one tag is not lettered properly.

c. *Code Identification*

(1) All items in this RFP, except items 00030 and 00031 shall, have the bid number marked on it in black indelible ink. The lettering shall be at least 1/4 inch. The location is at the discretion of the bidder. Item 00030, "Traffic Signal Pedestal – 8' and item 00031, "Traffic Signal Pedestal – 12', shall have the bid number cast into the item with the lettering at least 1/4 inch. The location is at the discretion of the bidder.

3.3.4 SECTION D (LIGHTING POLES, ARMS, BASES) PRICE LINES 00044 - 00049

3.3.4.1 Pole Identification

a. For items lighting pole (Type L, Type L-40) the following tag identification must be provided:

(1) An identification tag shall be welded on the inside of the pole 3 - 5 inches from the base. The tag shall be welded upside down so that the lettering "N.J.D.O.T." is not visible but instead facing into the pole.

b. For items lighting arm (8 foot and 15 foot) the following tag identification must be provided:

(1) An identification tag shall be welded onto the member of the arm, 3 - 5 inches away from the weld of the clamp assembly. The tag shall be welded upside down so that the lettering "N.J.D.O.T." is not visible but instead facing into the pole.

3.3.4.2 Tag Identification

a. Tag Construction

(1) The tag shall be manufactured from an aluminum alloy #6063-T6. The dimensions shall be 2-1/2 inches in length, 3/4 inches in width and 1/8 inches thick. The lettering shall be 1/4 inches with "NJDOT" indented in the center of the tag.

b. Verification By The Agency

(1) If improper identification is discovered after the poles are delivered to the agency, the contractor will be held responsible. Payment will not be processed until the manufacturer properly tags and identifies the material at his own expense per these specifications. The agency will hold the supplier responsible for the entire shipment even if only one tag is not lettered properly.

c. Code Identification

(1) All items in this bid shall have the bid number marked on it in black indelible ink. The lettering shall be at least 1/4 inch. The location is at the discretion of the bidder.

3.3.4.3 The vibration dampener shall be manufactured to the requirements of either Hapco Co., P & K Pole Products Or Union Metal Corporation or approved equal and shall include all necessary mounting hardware. Mounting hardware shall be stainless steel.

3.3.5 SECTION E (STEEL TRAFFIC SIGNAL POLES AND ARMS) PRICE LINES 00050 - 00062 **(Group award)**

3.3.5.1 Steel Poles shall be supplied with anchorage (anchor bolts, hex nuts, lock washers and flat washers) as detailed and required per NJDOT standard drawing T-4301.

3.3.5.2 Steel mast arms shall be supplied with all clamps attached to arm with all connecting hardware (hex head bolts, nuts and washers) as required by the manufacturer to install the pole and mast arm as a unit.

3.3.5.3 The Alternate pole top to be supplied shall be supplied with the Traffic Signal Standard, Type S and Traffic Signal Standard, Type SC poles for the Mongoose lighting fixture and shall include a two (2) inch Schedule 80 Tenon at least 6 inches above the top plate. Sketches #21 and #22 are to be utilized as references for the adapters.

3.3.6 SECTION F (CABINETS AND CABINET HARDWARE) PRICE LINES 00063 - 00072

SPECIFICATION FOR ALUMINUM ENCLOSURE **price line 00063**

N.J. Specification No. BME-AL-ENC

Date: May 14, 2007

New Jersey Department of Transportation, Bureau of Maintenance Engineering
Specification for an aluminum enclosure for electronic controls.

It is the purpose of this specification to describe minimum acceptable requirements for a pole mounted aluminum enclosure for electronic equipment and/or controls.

General - 1

- 1-1 The aluminum enclosure shall be 30" high x 18" wide x 15" deep. The cabinet shall be constructed from 0.125" thick, 5052-H32 marine grade aluminum and shall be rated a NEMA type 3R enclosure.
- 1-2 The cabinet shall have 0.125" mounting flanges with vertical slots for pole mounting and holes for wall mounting. The overall height with the mounting flange shall be 33 inches.

Construction - 2

- 2-1 The enclosure is to be supplied with a smooth uniform natural aluminum finish (mill finish to fed. Spec. QQA-250/8).
- 2-2 The cabinet shall be smooth and free of blow holes, flaws and imperfections and all seams are to be continuously welded. All surfaces, edges and openings shall be smooth and burr free.
- 2-3 The Cabinet enclosure shall be provided with louvers (4" high x 6" wide).
- 2-4 The cabinet shall be supplied with a 0.125" aluminum back panel for equipment mounting.
- 2-5 The cabinet door is to be attached to the body of the enclosure by means of a continuous 0.075" stainless steel piano-type hinge on the left side. The hinge shall be riveted to the door with 0.25" stainless steel rivets bolted to the cabinet with ¼-20 stainless steel carriage bolts and nylock nuts. The hinge pin shall be welded top and bottom to prevent tampering.
- 2-6 The door shall be sealed with a closed cell neoprene gasket bonded to the inside of the door with an oil resistant adhesive.
- 2-7 All external hardware shall be stainless steel.
- 2-8 The door lock shall be provided with a keyhole cover.
- 2-9 The cabinet shall be supplied with a thermostatically controlled forced air circulation system.
- 2-10 The cabinet shall be supplied with all the necessary material and hardware for the unit to be mounted on a pole.
- 2-11 For the meter cabinet, Type T, a "cast" aluminum cabinet must be supplied.
- 2-12 For the meter cabinet, Type M (Sheet Metal), a sheet aluminum cabinet must be supplied.
- 2-13 For the meter cabinet, Type P split skirt shall include a two-piece skirt of sheet aluminum with shelves. The skirt shall be an extension of the Traffic Signal P cabinet to contain batteries for the Uninterruptible Power System. The skirt manufacturer shall have a Traffic Signal, Type P Cabinet

with an approved NJDOT EE Number. The height of the skirt shall be a minimum of 18 inches and the width shall be 26 inches and the length shall be 44 inches. The shelves shall be adjustable with the capacity to hold six UPS batteries.

2-14 For the meter cabinet, Type P skirt shall include a skirt of sheet aluminum with shelves. The skirt shall be an extension of the Traffic Signal P cabinet to contain batteries for the Uninterruptible Power System. The skirt manufacturer shall have a Traffic Signal, Type P Cabinet with an approved NJDOT EE Number. The height of the skirt shall be a minimum of 18 inches and the width shall be 26 inches and the length shall be 44 inches. The shelves shall be adjustable with the capacity to hold six UPS batteries.

INSTRUCTIONS AND GUARANTEE - 3

- 3-1 No changes or substitutions in these requirements will be accepted unless authorized in writing by the Director.
- 3-2 The Enclosure shall carry a one year guarantee from the date of delivery against any imperfections in workmanship and material.

SPECIFICATION FOR 4 – PHASE TRAFFIC CONTROLLER ASSEMBLY **CABINET** **price line 00072**

N.J. Specification No. BME-TSC-4

Date: June 26, 2008

1. It is the purpose of this specification and that listed below to describe the minimum acceptable requirements for a four-phase traffic controller assembly.
2. In all questions relating to this specification, the decisions of the Director shall be final.
3. For those items not specifically defined, or for which specifications are not included, good practice as shown by the industry in general, shall apply.

General - I

1. The traffic controller assembly cabinet shall conform to the standards of the current national electrical manufacturers' association (NEMA) standards TS-1, NEMA standards publication 250-1985, NEMA standards publication WD6-1983, and the Federal Highway Administrations Manual on Uniform Traffic Control Devices (MUTCD).
2. All electrical components shall conform to the standards of the Underwriters' Laboratories (UL), incorporated and the Electrical Industries' Association (EIA), where applicable.
3. All materials and workmanship shall conform to the standards of The American Society for Testing Materials (ASTM) and the standards of the American National Standards Institute (ANSI), where applicable.
4. The manufacturer must supply certification by an independent technical laboratory, as to equipment compliance with NEMA Environmental and Operating Standards, in accordance with NEMA testing procedures. Documentation shall be provided for the controller unit and the signal monitor showing that, if any, component failed during the

tests, when it failed and what steps were taken to repair the units. The manufacturer or its' representative shall provide these test results without cost.

5. A Controller shall not be supplied with the traffic controller assembly cabinet.

6. A Conflict monitor shall not be supplied with the traffic controller assembly cabinet.

Construction - II

1. The cabinet enclosure shall be fabricated from a minimum thickness of 0.125 inch aluminum alloy sheet meeting the requirements in ASTM Specification No. 5052-H32. Refer to diagram No. 2 for dimensions.

2. All surfaces of the cabinet shall have an even, pleasing, unpainted finish and shall meet NEMA 3R rating. All edges shall be free of burrs and all corners shall be rounded. The top surface of the cabinet shall be angled towards the back to prevent accumulation of water.

3. There shall be one main door with an inset door. Both doors shall be flanged on all sides and shall be provided with a gasket, which forms a weather-tight seal when the door is closed.

4. Continuous hinges of stainless steel with stainless steel hinge pins shall be provided. Fastening of hinges to doors and cabinet shall be made using stainless steel carriage bolts and nuts.

5. The main door locking mechanism shall be a 3-point draw roller type. The pushrods shall be of sufficient thickness to rigidly lock the door.

6. The main locking mechanism shall be fitted to accommodate a Corbin No. 15481RS lock or equivalent. Lock location shall not conflict with handle rotation.

7. The inset door shall be fitted and provided with a Sub-Treasury Lock No. 0357S and keyed for a #10 key as manufactured by the American Hardware Company, New Britain, Connecticut or Equivalent.

8. A thermostatically controlled 100 CFM ventilation fan with finger guard shall be provided and mounted in the plenum area of the cabinet. The thermostat shall be mounted in the top of the cabinet and shall be adjustable between 35 and 45 degrees centigrade.

9. A 12 x 12 x 1 inch replaceable filter shall be fitted and installed directly behind the louvered vents on the main door.

10. An aluminum vent with screen shall be incorporated under the front edge of the cabinet top.

11. A plenum mounted 12" fluorescent fixture (12–15 watt) supplied with a lens shield shall be supplied and installed in the top front portion of the cabinet. A switch located near the door shall be provided to extinguish the lamp manually.

12. The door handle shall rotate inward from the locked position such that the handle does not extend beyond the perimeter of the door at any time.

13. The cabinet shall be provided with one metal shelf of substantial size to support the controller unit, monitor, and auxiliary equipment. The equipment and shelf shall be arranged so that it is possible to remove any piece of auxiliary equipment without removing any other piece of equipment.

14. Four equipment panels described in sections M, N, O, and P shall be provided and installed in the cabinet enclosure.

15. Specifications or products by name are intended to be descriptive of quality, workmanship, finish, function, and approximate characteristics desired and are not necessarily intended to be restrictive.

16. Substitutions of products for those named may be considered, provided the substitution offered is, in the opinion of the Department, equal or superior in quality, workmanship, finish, function, and characteristics to that specified herein.

Electrical - III

Load Switches (A)

1. All load switches shall be the three-circuit type conforming to current NEMA TS-1, part 5, and be equipped with three led indicators representative of the load switch inputs.
2. All load switches shall utilize optically isolated encapsulated modular solid-state relays.
3. Each optically isolated encapsulated relay utilized in the load switch shall have a minimum rating of 25 amps at 120 VAC.
4. A minimum of four (4) three -circuit load switches shall be furnished. If additional load switches are necessary to provide the timing and sequence of operation required by the contract to which this specification applies, the additional load switches must be furnished.

Flasher (B)

1. A solid-state two circuit type 3 flasher conforming to current NEMA TS-1, Part 8, except that each output shall be rated at 20 amps, shall be provided.
2. The flasher shall be equipped with neon or led indicators representative of the flasher outputs.

Flash Transfer Relays (C)

1. Flash transfer relays shall be equivalent to a Magnecraft W21ACPX-2, Class 21 power relay. One (1) flash transfer relay shall be provided with each assembly.

Detector Panel (D)

1. A detector panel shall be provided and mounted in the lower left side of the cabinet and shall conform to the attached Sketch No. 23.
2. Terminal blocks shall be double row barrier type with a rating of 30 amps.
3. One pedestrian isolation circuit, consisting of a 12-volt transformer, relay socket, and plug-in plastic encapsulated relay shall be provided and wired as shown.

4. Three MS-3106-A-22-14S detector harnesses shall be provided and wired to terminal Blocks TB1, TB2 and TB3. Harnesses shall extend beyond the front edge of the panel by 4 feet.

Police Panel (E)

1. The following items shall be installed on a panel behind the small door, in a recess of the door-in-door.

- A. Switch for Automatic/Manual Operation
- B. Switch for Automatic/Flash
- C. Switch for Signals Only "On" and "Off"
- D. A manual cord consisting of 6 feet of rubber insulated cord and a weather-proof, normally open momentary switch.

Manual control enable and interval advance shall be utilized during manual operation.

During signal off or flash operations from the police panel, the controller shall not be de-energized. An external restart shall be applied and held during these operations. The flash switch shall have priority over the signal off switch.

Back Panel (F)

1. A back panel shall be provided and shall serve as the interface between all equipment and components in order to produce signal operation.
2. Sufficient terminals shall be provided in the upper portion of the back panel to terminate all I/O wiring for the controller unit and signal monitor control wiring. All terminal blocks shall be mounted horizontally. Spacing between terminal blocks shall not be less than 1 inch.
3. Four load switch bases shall be provided and wired to accommodate the four-phase vehicle and pedestrian signal indications. Stacking of load switch bases shall not be permitted.
4. The flasher base shall be located adjacent to the load bay area. The output terminals of the flasher base shall be wired to the transfer relay base.
5. One transfer relay base shall be provided and wired to the flash program terminal block. The flash transfer relay shall be wired to be de-energized for flashing operation.
6. A flash program terminal block shall be provided for selective programming of field indication. Flash assignment shall be yellow for load switch (1) and red for load switch (2). The flash program block shall be located in close proximity of the flash transfer relay base and the field terminal blocks.
7. Field terminal blocks shall be provided and mounted horizontally across the bottom of the back panel. The blocks shall be double row high barrier types with a rating of 50 amps. All signal wire connections (load switch and/or transfer relay) to field terminal blocks shall be made with vinyl insulated spade type connectors.
8. The use of printed circuit boards in any part of the cabinet shall not be permitted.

9. All connections between the back panel and any adjacent panels shall be made through terminal blocks.

10. Power distribution shall be incorporated on the back panel. The following components shall be provided, mounted and wired on the back panel:

- A. A terminal block rated at 50 amps to connect incoming power leads.
- B. A 30 amp "e" frame "main" circuit breaker to protect control wiring and control equipment.
- C. A 20-amp "e" frame "flash" circuit breaker that supplies and protects the flasher only.
- D. A surge voltage protector, Hesco Model HE300-15 or equivalent.
- E. A 30-amp radio interference filter.
- F. A mercury plunger-type relay rated at 30 amps, which shall provide signal bus power when energized.
- G. Three ground bars with terminals capable of handling #10 wire. AC-, chassis and logic grounds shall be isolated from each other throughout the assembly. AC-ground bar shall provide 12 positions. Chassis and logic ground bars shall provide 6 positions.
- H. A ground fault interrupt outlet shall be provided.

11. The back panel shall be a hinged or pivoting drop-down type.

Wiring Practices (G)

1. All conductors, including spares, from the controller unit, conflict monitor and all other auxiliary equipment shall be terminated on interface terminal blocks in the cabinet and shall be identified. All terminal connections shall be marked with a number and abbreviated NEMA functions.

2. All harnesses shall be fitted with expandable self-fitting nylon sleeving between connectors and panels. Wiring behind the back panel shall be held tightly together using wire ties or lacing cord.

3. All connectors shall be complete with cable clamps, Ex.: Amphenol MS cable clamp type MS3057A.

4. The use of slip-on connectors behind the back panel shall not be permitted.

5. Signal bus distribution shall be provided by means of a continuous daisy chain with a single #12 copper wire with THHN insulation.

6. All signal leads from load switch and transfer relay bases to field terminal blocks shall be #16 copper wire with THHN insulation.

7. Monitor channel inputs shall terminate directly to the field terminal blocks. Channel 1 and 2 shall be assigned to monitor Phase 1 and 2, respectively.

3.3.14 INSTRUCTIONS AND GAURANTEE - IV

1. The supplier shall extend any policy guarantee usually offered to purchasers on article(s) and/or service(s) against defective materials and workmanship. The supplier shall replace, free of charge, any part or component and shall debug any software that

fails in any manner by reason of defective material, design or workmanship within a period of 24 months from the date of payment for the item.

2. Any repairs made by a manufacturer/representative shall be documented and returned with units when warranty repaired. This documentation shall include an explanation of the exact repairs made and identification of parts replaced by part number and circuit number. All warranty repairs shall be completed and equipment returned within 30 days of receipt.

3. Any circuit boards and/or modules, which produce more than 2 repeat failures within the warranty period shall be considered defective in the whole and shall be replaced with a new unit. An additional six-month warranty period applies to each new unit supplied and to any software work performed under warranty. The total warranty period under these conditions shall not extend beyond 30 months from the original purchase date.

4. One set of complete schematics with maintenance manual explaining theory of operation and one operator's manual of the controller unit, signal monitor and any other auxiliary equipment shall be supplied with each controller assembly furnished.

5. Two prints of the schematic-wiring diagram for the back panel, power panel, detector and switch panel shall be provided with each controller assembly furnished.

6. The department reserves the right to purchase additional equipment throughout the term of this contract at the established bid price.

7. Delivery of the initial order of controller assemblies must be completed within two (2) months of receipt of order. Delivery on subsequent orders during the term of the contract shall be at the rate of one (1) assembly as needed, from the receipt of order.

8. All traffic controller assemblies cabinets are to be shipped complete. Payment will be released for complete assemblies only.

9. Within one (1) month from the bid date, the manufacturer/representatives of the low bid shall deliver a complete and fully functional assembly, in compliance with these specifications, at the bidder's expense for inspection and testing before acceptance and award of this contract. Bid samples will be returned. The State reserves the right to perform any tests necessary to assure that the bid samples conform to this RFP. In addition, the State reserves the right to request a sample at anytime throughout the contract to assure that the item still conforms to the specifications. The items are to be sent to **the New Jersey Department of Transportation, 999 Parkway Avenue, Building #20, Trenton, NJ 08625, Attn: William Whypp, Telephone #(609) 530-2274.**

10. Failure to produce a completed controller assembly or to correct any items not found to be in compliance to these specifications during the above mentioned one (1) month inspection and testing period shall result in the rejection of the company's bid and award made to the next low bidder.

3.3.7 SECTION G (SIGNS/SIGN BRACKETS) PRICE LINES 00073 - 00077

SPECIFICATION FOR A LED (LIGHT EMITTING DIODE) **“RED SIGNAL AHEAD” SIGN** **price line 00073**

N.J.Specification No. BME-LED-RSASG

Date: May 14, 2007

New Jersey Department of Transportation, Bureau of Maintenance Engineering
Specification for a LED (light emitting diode) “RED SIGNAL AHEAD” SIGN.

It is the purpose of this specification to describe minimum acceptable requirements for a
LED (light emitting diode) “RED SIGNAL AHEAD” SIGN.

General - 1

- 1-3 The LED sign shall display the “RED” and “SIGNAL AHEAD” messages and have dimensions of 48 inch x 48 inch.
- 1-4 The LED SIGN SHALL CONSIST OF THE FOLLOWING:
 - A. Weather proof housing (NEMA type 4 enclosure) with door
 - B. Faceplate with polycarbonate lens
 - C. Aluminum “zee” section with support as necessary to secure sign to mounting arm.
 - D. Backplate
 - E. Power supply and transformers
 - F. High output orange led's for “SIGNAL AHEAD” legend and high output red led's for “RED” legend.
- 1-5 The legend color for “SIGNAL AHEAD” shall be 8 inch black letters with orange LED's placed along the centerlines of the letters.
- 1-4 The legend color for “RED” shall be 8 inch high letters formed by orange led's.
- 1-5 The formed letters shall conform to the United States Department of Transportation's standard alphabet and shall be 8 inches high.
- 1-6 “SIGNAL AHEAD” legend is to be continuously lit and “RED” legend shall be blanked out in normal operation. “SIGNAL AHEAD” and “RED” legend shall flash alternately during flash operation.

Construction – 2

- 2-5 A sheet of polycarbonate mounted in the extruded aluminum doorframe shall protect the entire front face of the signal. Lens material shall be 1/8 inch thick clear polycarbonate with vandal resistant properties.
- 2-6 The sign shall include a 0.125-inch thick aluminum weatherproof housing and door.
- 2-7 The interior of the housing, visor and faceplate shall be acid etched and painted with two coats of zinc chromate primer and finished with two coats of high quality flat black enamel to eliminate internal reflection. Two coats of yellow standard color no. 13538 baking enamel shall be used for exterior surfaces.

- 2-4 Two 3" x 1/4" x 36" long aluminum stiffeners shall be heli-arc welded to the interior of the housing.
- 2-5 Message shall be formed by single rows of high output led's 200 millimeters high formulated from a 7 x 5 matrix of individual elements or pixels. Each letter will be composed of exactly fifteen pixels.
- 2-6 EACH PIXEL SHALL HAVE A MINIMUM FULL INTENSITY OF 2500 Cd/Ft (Squared). AVERAGE LIFE OF EACH PIXEL SHALL BE A MINIMUM OF 100,000 HOURS. Allngap (Aluminum Indium Gallium Phosphorus) LED's RATED AT 100,000 HOURS AT 25⁰C And 20ma SHALL BE UTILIZED.
- 2-7 Each pixel element module shall be watertight (per NEMA 4x IP66) and designed for outdoor use at a minimum temperature range from -25 degrees C to +85 degrees C.
- 2-8 The sign shall be equipped with four 3/16 inch diameter weep holes located at the lower corners of the housing.
- 2-9 the design of the system shall permit attachment of a 200 millimeter visor to encompass the illuminated lettering. The visor shall be supplied with each unit.

Electrical – 3

- 3-1 The LED module shall be so designed that when operated over the specified ambient temperature and voltage range, the signal sign shall be legible during daylight and nighttime conditions from 10 feet to a minimum distance of 150 feet.
- 2-9 Allngap (Aluminum Indium Gallium Phosphorus) LED's RATED AT 100,000 HOURS AT 25⁰C And 20ma SHALL BE UTILIZED.
- 3-3 LED's shall not exhibit degradation of more than 30% of its light intensity following accelerated life testing, 85⁰c at 85% relative humidity operating for 1,000 hours with a forward current of 10 ma.
- 3-4 The sign assembly shall connect directly to line voltage, 120 volt nominal and shall be able to operate over the voltage range of 80 to 135 vac. The variation in line voltage shall not cause the line intensity to vary by more than 10% over the entire operating voltage range.
- 3-5 The sign assembly shall operate at a minimum at a temperature range of -25⁰c to +85⁰c.
- 3-6 The electrical connection shall be provided by a barrier-type terminal strip for connection of field wires. The barrier-type terminal strip shall be rated at 50 amps and shall have a minimum barrier height of 5/8 inches and shall utilize 8-32 x 5/16 inch screws as a minimum. Wire access shall be accomplished through a mounting hub (7/8 inch diameter).
- 3-7 A two-circuit solid state flasher shall be installed in the sign to alternately flash between "red" and "signal ahead" when the "red" mode is required.
- 3-8 The illumination system shall include a dimming capability. The dimming shall be

accomplished by utilizing a light activated solid state photocell and proportional duty cycle control that shall shorten the conducting pulse of the current waveform to dim the led's. The dimming shall be adjustable over a reasonable range as determined by the engineer. Separate dimming ranges shall be provided for daytime and nighttime operating conditions.

- 3-9 Remote control operation of the sign shall be accomplished by the activation of a load switch at the traffic signal, that shall be included as part of the sign assembly. The activation load switch shall not be the same load switch that powers the red traffic signal.

Instructions And Guarantee - 4

- 4-1 One schematic wiring diagram and installation manual shall be provided with each sign assembly.
- 4-2 No changes or substitutions in these requirements will be accepted unless authorized in writing by the Director.
- 4-3 The blackout sign shall carry a one year guarantee from the date of delivery against any imperfections in workmanship and material.
- 4-4.1 The blank-out signs LED shall be bid at the size shown and shall conform to NJ Specification BME-LED-NTBLO Dated May 14, 2007. The blank-out signs shall be supplied with all mounting hardware and necessary brackets. The legend for Item shall be specified at the time of order. (sketch # 1)

3.3.7.1 SIGNS/SIGN BRACKETS – SCHOOL SPEED LIMIT SIGN WITH FLASHER (PRICE LINE 00074)

Additional specification information for School Speed Limit Sign with Flasher (price line 00074) can be found on the NJDOT website as follows: <http://www.state.nj.us/transportation/eng/elec/>

SPECIFICATION FOR LED (LIGHT EMITTING DIODE) "NO LEFT TURN" /"NO RIGHT TURN"/"NO TURN ON RED" and "BLANK"(MESSAGE TO BE DETERMINED WHEN ORDERED) BLANK OUT SIGNS price lines 00075 -00077

N.J. Specification No. BME-LED-NTBLO

Date: June 26, 2008

New Jersey Department of Transportation, Bureau of Maintenance Engineering Specification for a LED (light emitting diode) "NO LEFT TURN", "NO RIGHT TURN", "NO TURN ON RED" and BLANK (Message to be determined when ordered) blank out sign.

It is the purpose of this specification to describe the minimum acceptable requirements for a LED (light emitting diode) "NO LEFT TURN", "NO RIGHT TURN", "NO TURN ON RED" and BLANK (Message to be determined when ordered) blank out sign.

General - 1

- 1-1 The LED blank out sign that displays the " NO LEFT TURN", "NO RIGHT TURN", "NO TURN ON RED" and BLANK (Message to be determined when ordered) shall have the dimensions of 30 inches wide by 30 inches tall.

1-2 The LED blank out sign shall consist of the following:

- A. Weather proof housing with door.
- B. Faceplate with polycarbonate lens.
- C. Visor.
- D. Back plate.
- E. Power supply with transformers.
- F. High output white LED's.

1-3 The legend color shall be LUNAR WHITE.

1-4 The formed letters shall conform to The United States Department of Transportation's standard alphabet.

Construction - 2

2-1 The entire front face of the signal shall be protected by a sheet of polycarbonate mounted in the extruded aluminum doorframe. The lens material shall be 1/8 inch thick clear polycarbonate with vandal resistant properties.

2-2 The sign shall include a 0.125 inch thick aluminum weatherproof housing and door. Closed cell neoprene gasketing shall be attached to the face of the enclosure to provide a weather-tight seal against the door.

2-3 The interior of the housing, visor and faceplate shall be acid etched and painted with two coats of zinc chromate primer and finished with two coats of high quality flat black enamel to eliminate internal reflection. Two coats of yellow standard color no. 13538 baking enamel shall be used for exterior surfaces.

2-4 The housing shall be supplied with standard 1-1/2 inch N.P.T. hubs, top and bottom.

2-5 The message shall be formed by single rows of high output LED's spaced at 1/2" o.c. (nominal).

2-6 The signal shall completely blank out when not energized.

2-7 The sign shall be equipped with four 3/16 inch diameter weep holes located at the lower corners of the housing.

2-8 All mounting hardware (hinge pins, nuts, bolts, lock washers, etc.) shall be stainless steel.

2-9 Access to the rear compartment shall be through a hinged rear doorframe.

Electrical - 3

3-1 The LED module shall be so designed that when operated over the specified ambient temperature and voltage range, the signal shall be readable, during daylight and nighttime conditions, between 10 feet and 150 feet.

3-2 AlInGap (aluminum indium gallium phosphorus) LED's rated at 100,000 hours at 75° F and 20ma shall be utilized.

- 3-3 LED's shall not exhibit degradation of more than 30% of their initial light intensity following accelerated life testing, 185°F at 85% relative humidity, operating for 1,000 hours, with a forward current of 10 ma.
- 3-4 The sign assembly shall connect directly to 120 volt AC nominal line voltage and shall be able to operate over a voltage range of 80 to 135 VAC. The variation in line voltage shall not cause the light intensity to vary by more than 10% over the entire voltage range.
- 3-5 The sign assembly shall operate over a temperature range of -35°F through +165°F.
- 3-6 Provision for field wire connection shall be provided by a 50 Amp rated, barrier type, closed back terminal strip with #10-32 terminal screws. Cable entrance shall be through a weather-resistant strain relief connector.

Instructions and guarantee - 4

- 4-1 No changes or substitutions in these requirements will be accepted unless authorized in writing by the Director.
- 4-2 One schematic wiring diagram and installation manual shall be provided with each unit.
- 4-3 Each blank out sign shall carry a one-year guarantee from the date of delivery to cover any imperfections in material and workmanship.
- 4-4 The supplier agrees to deliver a sample of the LED sign assembly to be supplied in compliance with these specifications for test before acceptance if requested by NJDOT. After evaluation the sample will be returned.

3.3.8 SECTION H (SIGNAL CONTROL DEVICES) PRICE LINES 00078 - 00088

3.3.8.1 The microwave sensor must be supplied with all mounting hardware required to install on standard New Jersey Department of Transportation Type "T" traffic signal pole. All mounting hardware (bolts, nuts, washers, banding, etc) must be stainless steel.

3.3.8.2 Pedestrian Pushbutton (ADA Compliant System) as per NJ Specification No. BME-PPB-ADA-CS (dated May 14, 2007)

SPECIFICATION FOR A PEDESTRIAN PUSHBUTTON **ADA COMPLIANT SYSTEM** **price line 00078**

N.J. Specification No. BME-PPB-ADA-CS

Date: May 14, 2007

The New Jersey Department of Transportation, Bureau of Maintenance Engineering Specification for a Pedestrian Pushbutton ADA Compliant.

It is the purpose of this specification to describe minimum acceptable requirements for a Pedestrian Pushbutton ADA Compliant.

GENERAL – 1

- 1-1 The PEDESTRIAN PUSHBUTTON ADA COMPLIANT SYSTEM at a minimum shall include four (4) 2 inch ADA compliant buttons constructed of 316L stainless steel and one (1) latching pushbutton isolation control unit
- 1-2 The button must be able to hold a call for a minimum of 5 seconds. The button shall require no more than 2 lbs of pressure for actuation. The button must be designed so that ice cannot form such that it would impede the function of button. Total depth, from the face of button cap to back of button terminal, shall be 1.75 inches. The body material of the button shall be cast aluminum. The pedestrian pushbutton and the latching isolation control unit are a matched system; the Pedestrian Pushbutton must be fully operational and compatible with the Latching Pushbutton Isolation Control Unit.
- 1-3 The pushbutton shall incorporate a latching LED to indicate that the button has been pressed. Once the pushbutton is pressed, the LED must stay on until the walk cycle goes into effect. The LED shall have a brightness of at least 1200 mcd with a viewing angle of at least 160 degrees.
- 1-4 The pushbutton shall incorporate a two-tone audible beep for press and release, 2.5 kHz and 2.3 kHz for the duration of 50 m sec. The beep shall activate simultaneously with the LED flash.
- 1-5 The pushbutton shall be a non-moving type utilizing a pressure sensitive solid-state piezo switch for actuation. The piezo switch shall have an operating life greater than 100 million actuations.
- 1-6 The pushbutton shall have transient surge protection which shall include, at a minimum, a resistor and TVS diode at the input connection.
- 1-7 The pushbutton shall be powered by 18VDC nominal and shall be installed using no more than two wires.
- 1-8 The pushbutton housing shall be a low profile type made from cast aluminum. It shall use two ¼ 20 threaded stainless steel bolts for mounting to a pole. When the button is attached to the housing the assembly shall extend no more than 2 inches from the pole. The button shall attach to the housing using four spanner type vandal resistant screws. The housing shall have a nipple for inserting into the pole which shall extend from the back of the housing ½ inch and shall have an outside diameter of no more than 1.25 inches. The housing itself shall extend from the pole ½ inch.
- 1-9 The pushbutton assembly shall be a vandal resistant type designed to withstand impacts from heavy objects. The button body must have raised ridges on all sides to protect the button cap against side impacts. The button shall be designed so that it cannot be made to "stick" on. In the event the button is pressed for longer than 10 seconds, it shall reset itself and work normally even if it is still being held in. The button shall be completely sealed and the electronics shall be encapsulated so that the button can function even after being immersed in water for an extended duration.
- 1-10 The pedestrian pushbutton shall be a Polara Engineering Model BDLL2-Y or equivalent with a low profile housing Model BDPM-Y or equivalent.

LATCHING PUSHBUTTON ISOLATION CONTROL UNIT - 2

- 2-1 One latching pushbutton isolation control unit shall be installed in the traffic control cabinet to interface the pedestrian pushbutton field wiring with the controller assembly. The unit

shall service up to four phases with up to five buttons per phase. All inputs must be optically isolated. The dimensions of the unit shall be 5 inches W x 5.5 inches L x 2.5 inches H. The isolation control unit and pedestrian pushbuttons are a matched system; the buttons must be fully operational and compatible with the isolation control unit.

- 2-2 The isolation control unit must turn on and latch the LED on all buttons on a phase when any single button on a phase is pressed. The unit must turn off the LED's on all pushbuttons on a phase when the walk signal for that phase turns on. The pushbuttons shall not respond while the walk phase is on, Except during a walk period, any button pushed shall cause an optically isolated relay to close.
- 2-3 The isolation control unit shall be powered by 115VAC and shall use a ¼ amp 5x20mm slow-blow fuse. It must perform all functions within 12-24 VDC over a single pair of wires for each phase or to each button. No additional field wiring to the buttons shall be required. The unit shall include a removable transparent cover to protect the user from accidentally touching the electronics. Power consumption of the unit, with the buttons in standby, shall not exceed 3 watts.
- 2-4 The isolation control unit shall have one LED indicator for each phase of operation. Each LED will light each time a button is pressed for that phase and will remain lit for the duration that the button is pressed.
- 2-5 The isolation control unit must have field replaceable isolation cards for each phase. The size of these cards shall be 1.3 inches x 1.9 inches. Each card shall have gold plated contacts for plugging into the control unit.
- 2-6 The card shall have transient surge protection which shall include, at a minimum, a resistor and TVS diode at the input connection.
- 2-7 The output relay shall be a solid state Photo-Mos type. It shall provide a contact closure compatible with either AC or DC pedestrian inputs. The isolation shall be at least 2500VAC. Each relay shall handle a maximum of .2 amps. The output to the controller assembly pushbutton input shall not exceed 15 Ohms.
- 2-8 The isolation control unit shall be fully functional throughout the full NEMA temperature range (-30F to 165F).
- 2-8 The Latching Pushbutton Isolation Control Unit shall be a Polara Engineering Model LPICU-NJ or equivalent.

Instructions and Guarantee - 3

- 3-1 One wiring diagram and installation sheet shall be provided with each PPB-ADA-CS system.
- 3-2 No changes or substitutions in these requirements will be accepted unless authorized in writing by the Director.
- 3-3 The Pedestrian Pushbutton-ADA shall carry a two year guarantee from the date of delivery against any imperfections in workmanship and material.

SPECIFICATION FOR A PEDESTRIAN PUSHBUTTON

ADA **price line 00079**

N.J. Specification No. BME-PPB-ADA

Date: June 23, 2008

The New Jersey Department of Transportation, Bureau of Maintenance Engineering Specification for a Pedestrian Pushbutton ADA Compliant.

It is the purpose of this specification to describe minimum acceptable requirements for a Pedestrian Pushbutton ADA compliant.

GENERAL – 1

- 1-1 The PEDESTRIAN PUSHBUTTON ADA COMPLIANT shall at a minimum shall include one (1) 2 inch ADA compliant button constructed of 316L stainless steel.
- 1-2 The button must be able to hold a call for a minimum of 5 seconds. The button shall require no more than 2 lbs of pressure for actuation. The button must be designed so that ice cannot form such that it would impede the function of button. Total depth, from the face of button cap to back of button terminal, shall be 1.75 inches. The body material of the button shall be cast aluminum. The pedestrian pushbutton and the latching isolation control unit are a matched system; the Pedestrian Pushbutton must be fully operational and compatible with the Latching Pushbutton Isolation Control Unit.
- 1-3 The pushbutton shall incorporate a latching LED to indicate that the button has been pressed. Once the pushbutton is pressed, the LED must stay on until the walk cycle goes into effect. The LED shall have a brightness of at least 1200 mcd with a viewing angle of at least 160 degrees.
- 1-4 The pushbutton shall incorporate a two-tone audible beep for press and release, 2.5 kHz and 2.3 kHz for the duration of 50 msec. The beep shall activate simultaneously with the LED flash.
- 1-5 The pushbutton shall be a non-moving type utilizing a pressure sensitive solid-state piezo switch for actuation. The piezo switch shall have an operating life greater than 100 million actuations.
- 1-6 The pushbutton shall have transient surge protection which shall include, at a minimum, a resistor and TVS diode at the input connection.
- 1-7 The pushbutton shall be powered by 18VDC nominal and shall be installed using no more than two wires.
- 1-8 The pushbutton housing shall be a low profile type made from cast aluminum. It shall use two ¼ 20 threaded stainless steel bolts for mounting to a pole. When the button is attached to the housing the assembly shall extend no more than 2 inches from the pole. The button shall attach to the housing using four spanner type vandal resistant screws. The housing shall have a nipple for inserting into the pole which shall extend from the back of the housing ½ inch and shall have an outside diameter of no more than 1.25 inches. The housing itself shall extend from the pole ½ inch.
- 1-9 The pushbutton assembly shall be a vandal resistant type designed to withstand impacts from heavy objects. The button body must have raised ridges on all sides to protect the

button cap against side impacts. The button shall be designed so that it cannot be made to "stick" on. In the event the button is pressed for longer than 10 seconds, it shall reset itself and work normally even if it is still being held in. The button shall be completely sealed and the electronics shall be encapsulated so that the button can function even after being immersed in water for an extended duration.

- 1-11 The pedestrian pushbutton shall be a Polara Engineering Model BDLL2-Y or equivalent with a low profile housing Model BDPM-Y or equivalent.

Instructions and Guarantee - 2

- 2-1 One wiring diagram and installation sheet shall be provided with each PPB-ADA-CS system.
- 2-2 No changes or substitutions in these requirements will be accepted unless authorized in writing by the Director.
- 2-3 The Pedestrian Pushbutton-ADA shall carry a two year guarantee from the date of delivery against any imperfections in workmanship and material.

SPECIFICATION FOR A TRAFFIC SIGNAL UNINTERRUPTIBLE POWER SUPPLY **price line 00085**

N.J. Specification No. BME-UPS-1

Date: May 14, 2007

The New Jersey Department of Transportation, Bureau of Maintenance Engineering Specification for an Uninterruptible Power Supply System.

It is the purpose of this specification to describe minimum acceptable requirements for an Uninterruptible Power Supply (UPS) system.

GENERAL – 1

- 1-1 The UPS system shall be comprised of the UPS module, a power management module (PMM), and/or a power interface module (PIM), batteries, and connecting harnesses.
- 1-2 The primary purpose of this equipment is to provide battery back up in the event of a utility power failure or partial interruption. The switch-over from utility power failure or partial interruption to UPS shall occur with no interruption to the traffic signal.
- 1-3 The manufacturer, upon request, shall provide documentation from an independent laboratory pertaining to 1-3 and environmental and vibration testing as per NEMA TS standards.
- 1-4 When utility power is outside the user set points, the UPS inverter provides seamless output power from the batteries and switches the power management module to the UPS output. The power management unit contacts shall be user programmable to delay start from 0-8 hours when the system operates on battery.
- 1-5 When utility power returns to the user set points, the UPS will synchronize the inverter to the incoming utility AC power and provide seamless transfer back to the utility AC power and begin to re-charge the batteries.

ELECTRICAL/MECHANICAL – 2

- 2-1 The UPS shall be able to function properly in the input voltage range of 100 volts AC to 130 volts AC without switching over to battery power.
- 2-2 The UPS shall provide regulated power to any power factor from 0 to 1, leading, lagging, or non-linear and shall be capable of handling non-symmetrical loads.
- 2-3 The operating temperature range shall be certified to operate from – 35 °F to +165 °F (–37 °C to +74 °C), 5 to 95% relative humidity, non-condensing.
- 2-4 The output voltage regulation shall be 120 volts AC +/- 3%.
- 2-5 The output of the unit shall produce less than 4% Total Harmonic Distortion (THD).
- 2-6 The physical size of the UPS module shall not exceed 19" wide x 14" deep x 6" high.
- 2-7 Quick disconnect/locking connectors shall be utilized to ensure connection integrity and to prevent operation of the UPS without connection to the PMM and/or PIM shall be provided.
- 2-8 The power output shall exceed 850 watts with the frequency at 50 Hz or 60 Hz.
- 2-9 Advanced heat sink design shall be utilized to minimize the use of the cooling fan and to extend fan life.
- 2-10 The system shall comply with the lightning and surge protection standard, ANSI/IEEE C.62.41/C.62.45 Cat A&B. Upon request, the bidder shall provide compliance.
- 2-11 The UPS shall be equipped with protection on the inputs and outputs for shorts circuits and overloads.

POWER MANAGEMENT MODULE/POWER INTERFACE MODULE – 3

- 3-1 The PMM and/or PIM shall provide easy customer interface and can operate without disturbing power to the protected load while the UPS module is being "hot swapped".
- 3-2 The PMM and/or PIM shall have three sets of independent auxiliary contacts for Flash, Delayed Flash and Monitoring the UPS.
- 3-3 Terminal blocks shall be provided for connecting the utility power input and the PMM and/or PIM output to the load.

Batteries – 4

- 4-1 Batteries shall be Absorbed Glass Mat, Non-spillable, Valve Regulated, and Lead Acid type with tongue/groove epoxy seal.
- 4-2 Batteries shall be capable of at a minimum to providing a typical 3-year average operating life.
- 4-3 All connections at the battery should be provided with factory sealed wire leads that included quick disconnects. All hardware shall be stainless steel.

- 4-4 Batteries are to be connected in parallel so as to provide redundancy should any battery fail and to insure that each battery jar is equally charged. If batteries are connected in series to achieve the required operating voltages of the UPS, a parallel string of batteries shall also be provided.

UPS MODULE – 5

- 5-1.1 The UPS module shall be a digitally controlled microprocessor system with Transient Voltage Surge Suppression.
- 5-1.2 The front panel of the UPS module shall be equipped with alarm, battery level, and run time indicators, with two RS232 type data and signal ports as well as an electrical outlet.
- 5-1.3 The UPS module shall be able to provide the number of power utility failures.
- 5-1.4 The UPS module shall be able to be monitored by a Web based network interface.
- 5-6 The UPS module shall contain a 3-stage charger to re-charge and to ensure batteries are maintained at full charge.
- 5-7 The UPS module shall be able to be replaced without shutting down the traffic controller system.
- 5-8 The UPS module shall contain a charger to recharge and to ensure batteries are maintained at full charge. The charger shall be capable of fully recharging the batteries from a depleted state after unit shutdown in approximately eight hours.
- 5-9 The UPS module shall have protection from brownout conditions and voltage spikes from the input voltage.

Instructions and Guarantee - 6

- 6-1 One wiring diagram and installation sheet shall be provided with each UPS system.
- 6-2 No changes or substitutions in these requirements will be accepted unless authorized in writing by the Director
- 6-3 The UPS system shall carry a two-year guarantee from the date of delivery against any imperfections in workmanship and material.

SPECIFICATION FOR UNINTERRUPTIBLE POWER SYSTEM **REPLACEMENT BATTERIES - 6** **price line 00086**

N.J. Specification No. BME-UPSRB-6

Date: May 14, 2007

New Jersey Department of Transportation, Bureau of Maintenance Engineering
Specification for the Replacement Batteries of Uninterruptible Power Systems.

It is the purpose of this specification to describe minimum acceptable requirements for replacement batteries for an Uninterruptible Power System (UPS).

GENERAL - 1

- 1-1 The equipment must be new and of the latest digital design. It shall be of the current manufacture, i.e. within the 12-month period preceding delivery. The model must be in current production. Discontinued models will not be accepted.
- 1-2 The installation and operation of the device shall not require any special licensing, frequency assignment or permits from the FCC or other Federal agency to operate as described in this specification.

CONSTRUCTION - 2

- 2-1 Batteries shall be Absorbed Glass Mat, Non-spillable, Valve Regulated, and Lead Acid type with tongue/grove epoxy seal.
- 2-2 Batteries shall be capable of at a minimum to providing a typical 3-year average operating life.
- 2-3 All connections at the battery should be provided with factory sealed wire leads that included quick disconnects. All hardware shall be stainless steel.
- 2-4 The nominal voltage shall be 12 Volts DC.
- 2-5 The batteries shall meet or exceed the Military Specification #MIL-B-8565J(Hydrogen Gas Emissions). Testing from an independent shall be provided upon request.
- 2-6.1 The batteries shall be recycled at any smelter that processes lead acid automobile batteries.
- 2-7 The batteries shall be exempt from the hazardous material category when being shipped. Testing from an independent shall be provided upon request.
- 2-8 The operating temperature range shall be certified at a minimum, – 40 °F to +160 °F (–40 °C to +71 °C).
- 2-9 A set of batteries shall consist of six 12 volt DC with 41 A/H capacity or equivalent.
- 2-10 The float charge voltage shall be greater than 2.20 volts per cell at +77 °F (25 °C).
- 2-11 The posts of the battery shall be sealed. The connecting wires shall be at least 6 inches in length with quick disconnects included. The connecting wires shall be included.
- 2-12 The width dimensions of the battery shall not exceed 7 inches (17.8 cm), the length shall not exceed 10 inches (25.5 cm).

INSTRUCTIONS AND GUARANTEE - 3

- 3-1 No changes or substitutions in these requirements will be accepted unless authorized in writing by the Director.
- 3-2 The battery shall carry a one (1) year guarantee from the date of delivery against any imperfections in workmanship and material.

SPECIFICATION FOR A TRAFFIC SIGNAL UNINTERRUPTIBLE POWER SUPPLY
price line 00087

N.J. Specification No. BME-UPS-2

Date: May 14, 2007

The New Jersey Department of Transportation, Bureau of Maintenance Engineering Specification for an Uninterruptible Power Supply System.

It is the purpose of this specification to describe minimum acceptable requirements for an Uninterruptible Power Supply (UPS) system.

GENERAL – 1

- 1-1 The UPS system shall be comprised of the UPS module, a power management module (PMM), and/or a power interface module (PIM), batteries, and connecting harnesses.
- 1-2 The primary purpose of this equipment is to provide real-time online continuous conditioned power for the traffic control system and associated equipment at all times.
- 1-3 In the event of a utility power failure or partial interruption, the UPS shall provide battery backup at the traffic signal. The switch-over from utility power failure or partial interruption to UPS shall occur with no interruption to the traffic signal.
- 1-4 The manufacturer, upon request, shall provide documentation from an independent laboratory pertaining to 1-3 and environmental and vibration testing as per NEMA TS standards.

ELECTRICAL/MECHANICAL – 2

- 2-2 The UPS shall be able to function properly in the input voltage range of 85 volts AC to 135 volts AC and a frequency range of 48 to 62 Hz without switching over to battery power.
- 2-2 The UPS shall provide regulated power to any power factor from 0 to 1, leading, lagging, or non-linear and shall be capable of handling non-symmetrical loads.
- 2-3 The operating temperature range shall be certified to operate from – 40 °F to +165 °F (–40 °C to +74 °C), 5 to 95% relative humidity, non-condensing.
- 2-4 The output voltage regulation shall be 120 volts AC +/- 3%.
- 2-5 The output of the unit shall produce less than 4% Total Harmonic Distortion (THD).
- 2-6 The physical size of the UPS module shall not exceed 19" wide x 14" deep x 4" high.
- 2-7 Quick disconnect/locking connectors shall be utilized to ensure connection integrity and to prevent operation of the UPS without connection to the PMM and/or PIM shall be provided.
- 2-8 The power output shall exceed 850 watts with the frequency at 50 Hz or 60 Hz.
- 2-9 The UPS shall be equipped with protection on the inputs and outputs for shorts circuits and overloads.

POWER MANAGEMENT MODULE/POWER INTERFACE MODULE – 3

- 3-1 The PMM and/or PIM shall provide easy customer interface and can operate without disturbing power to the protected load while the UPS module is being “hot swapped”.
- 3-2 The PMM and/or PIM shall have three sets of independent auxiliary contacts for Flash, Delayed Flash and Monitoring the UPS.
- 3-3 Terminal blocks shall be provided for connecting the utility power input and the PMM and/or PIM output to the load.

BATTERIES – 4

- 4-1 Batteries shall be Absorbed Glass Mat, Non-spillable, Valve Regulated, and Lead Acid type with tongue/groove epoxy seal.
- 4-2 Batteries shall be capable of at a minimum to providing a typical 3-year average operating life.
- 4-3 All connections at the battery should be provided with factory sealed wire leads that included quick disconnects. All hardware shall be stainless steel.
- 4-4 Batteries are to be connected in series.

UPS MODULE – 5

- 5-2 The input voltage to the UPS module shall be continuously converted from AC to DC. The DC voltage shall be processed and then DC shall be converted back to AC creating a clean regenerated voltage at all times.
- 5-3 The UPS module shall be a digitally controlled microprocessor system with Transient Voltage Surge Suppression.
- 5-4 The front panel of the UPS module shall be equipped with alarm, battery level, and run time indicators, with two RS232 type data and signal ports as well as an electrical outlet.
- 5-5 The UPS module shall be able to provide the number of power utility failures.
- 5-6 The UPS module shall be able to be monitored by a Web based network interface.
- 5-6 The UPS module shall contain a 3-stage charger to re-charge and to ensure batteries are maintained at full charge.
- 5-7 The UPS module shall be able to be replaced without shutting down the traffic controller system.
- 5-9 The UPS module shall contain a charger to recharge and to ensure batteries are maintained at full charge. The charger shall be capable of fully recharging the batteries from a depleted state after unit shutdown in approximately eight hours.
- 5-9 The UPS module shall have protection from brownout conditions and voltage spikes from the input voltage.

Instructions and Guarantee - 6

- 6-1 One wiring diagram and installation sheet shall be provided with each UPS system.
- 6-2 No changes or substitutions in these requirements will be accepted unless authorized in writing by the Director
- 6-3 The UPS system shall carry a two-year guarantee from the date of delivery against any imperfections in workmanship and material.

SPECIFICATION FOR UNINTERRUPTIBLE POWER SYSTEM **REPLACEMENT BATTERIES - 2** **price line 00088**

N.J. Specification No. BME-UPSRB-2

Date: May 14, 2007

New Jersey Department of Transportation, Bureau of Maintenance Engineering
Specification for the Replacement Batteries of Uninterruptible Power Systems.

It is the purpose of this specification to describe minimum acceptable requirements for replacement batteries for an Uninterruptible Power System (UPS).

GENERAL - 1

- 1-3 The equipment must be new and of the latest digital design. It shall be of the current manufacture, i.e. within the 12-month period preceding delivery. The model must be in current production. Discontinued models will not be accepted.
- 1-4 The installation and operation of the device shall not require any special licensing, frequency assignment or permits from the FCC or other Federal agency to operate as described in this specification.

CONSTRUCTION - 2

- 2-4 Batteries shall be Absorbed Glass Mat, Non-spillable, Valve Regulated, and Lead Acid type with tongue/grove epoxy seal.
- 2-5 Batteries shall be capable of at a minimum to providing a typical 3-year average operating life.
- 2-6 All connections at the battery should be provided with factory sealed wire leads that included quick disconnects. All hardware shall be stainless steel.
- 2-4 The nominal voltage shall be 12 Volts DC.
- 2-5 The batteries shall meet or exceed the Military Specification #MIL-B-8565J(Hydrogen Gas Emissions). Testing from an independent shall be provided upon request.
- 2-13 The batteries shall be recycled at any smelter that processes lead acid automobile batteries.
- 2-14 The batteries shall be exempt from the hazardous material category when being shipped. Testing from an independent shall be provided upon request.

- 2-15 The operating temperature range shall be certified at a minimum, – 40 °F to +160 °F (–40 °C to +71 °C).
- 2-16 A set of batteries shall consist of two 12 volt DC..
- 2-17 The float charge voltage shall be greater than 2.20 volts per cell at +77 °F (25 °C).
- 2-18 The posts of the battery shall be sealed. The connecting wires shall be at least 6 inches in length with quick disconnects included. The connecting wires shall be included.
- 2-19 The width dimensions of the battery shall not exceed 7 inches (17.8 cm), the length shall not exceed 10 inches (25.5 cm).

INSTRUCTIONS AND GUARANTEE – 3

- 3-1 No changes or substitutions in these requirements will be accepted unless authorized in writing by the Director.
- 3-2 The battery shall carry a one (1) year guarantee from the date of delivery against any imperfections in workmanship and material.

3.3.9. SECTION I (MISCELLANEOUS SIGNAL PRODUCTS/DEVICES) **Price Lines 00089 - 00099**

- 3.3.9.1 "Bolt-Anchor USS Hex Head - Set" shall consist of (4) 1" diameter threaded rods, (12) 1" nuts, (12) 1" lock washers and (12) flat washers. The material and size requirements shall conform to sketch "Sketch #10".
- 3.3.9.2 Loop detector sealant can be provided in kit form, which may require mixing of liquid, powder and tube of flex-tard to delay curing time, or in pre-mixed containers with a tube of flex-tard supplied with each container.
- 3.3.9.3 If a kit is provided, the maximum yield of the kit shall be two (2) gallons of loop sealant.
- 3.3.9.4 If a pre-mixed container is provided the maximum container size shall be two (2) gallons of loop sealant.
- 3.3.9.5 The shelf life of the loop sealant shall be approximately one (1) year at normal storage temperatures (50 F to 80 F).
- 3.3.9.6 The bidder must list the unit price of the container and the actual container size in gallons or loop sealant yield in gallons, if a kit is provided.
- 3.3.9.7 Award of loop sealant will be based on conformance with the specifications and unit cost per gallon of loop sealant.
- 3.3.9.8 The geometrically programmed louver shall be supplied with a slotted full circle visor. The louver and visor shall be polycarbonate plastic. The louver shall be easily adjustable for either horizontal or vertical lane control with view angles adjustable from 7 degrees to 42 degrees. The assembly shall easily retrofit onto an existing signal indication.

3.3.9.9 WIRELESS SITE SURVEY KIT **Price line 00090**

The wireless Site Survey Kit shall provide a simple and accurate method of determining exact radio path signal strength values on new and existing systems. The Site Survey Kit is used to determine the feasibility of a wireless system and ensures optimized system configuration and performance. This battery-operated kit, complete with antennas and cabling, is housed in a convenient industrial carrying case and with its portable, compact design, testing multiple sites is quick and easy. the following information can be quickly determined using the Site Survey Kit:

A. Path Quality – Determine actual signal strength (dBm) between sites.

B. Data Integrity – Poll testing (data integrity) with data messages to provide statistics on data quality over the wireless link.

C. Spectrum Analysis - Analyze the radio spectrum from 902 – 928 MHz and 2.40 – 2.4835 GHz. Provide an indication of other Spread Spectrum users in the area. Allow for selection of an appropriate HOP Pattern to avoid harmful interference.

D. Key Features:

1. Battery operated and portable
2. Accurate radio path determination
3. 900 MHz & 2.4 GHz Systems
4. 20 mile range
5. Contained within a weather proof Pelican Case for protection and portability
6. Includes all wireless equipment required for a Site Survey or a temporary wireless installation
7. Installed and fully operational in less than 30 minutes in order to minimize your engineering costs.
8. Actual on-site testing confirms the feasibility of your 900 MHz or 2.4 GHz Spread Spectrum Systems.

E. Site Survey Kit includes the following:

1. Mounting Hardware
2. AC Charger
3. DC Charging cable
4. Software
5. Host Radio
6. Remote Radio
7. Antenna Masts
8. RF Coaxial Cable
9. 2 Yagi Antennas
10. 1 Omni Antenna
11. One Lap top computer

The Site Survey Kit shall include a Microsoft Windows-based lap top computer (PC) and computer carrying case to process the system software during testing process. The PC operating system shall be Windows XP and include a HTML browser. The minimum lap top PC hardware specification shall be Pentium (or equivalent) dual processor at 1.60 GHz, 2 MB RAM, 100.0 GB hard drive, Combo 24x/10x/24x CR-RW and 8x DVD-ROM drive (for software installation), 4 USB connections, one network connection, one phone connection, one RS232 serial port, and 640 X 480 monitor resolution. The software running on the lap top PC shall provide the user interface for the Tester, allowing test setup, data entry, test report storage, retrieval, and review.

3.3.9.10 SECTION I WIRELESS CONTACT CLOSURE Price lines 00091 - 00092

The wireless contact closure units shall provide software programmable I/O mapping, two way communication, plug and play, point-to-point and point-to-multipoint configurations. The wireless contact closure units shall perform the following:

Vehicle Preemption, Fire Hall and Railroad Preemption, Advanced Vehicle Detection, Radar Solutions, Video Solutions, Loop Solutions, Ramp Metering, Variable Message Signs (VMS), School Zone Flashers / Advanced Warning Beacons

The spread spectrum wireless equipment can provide communications with the detectors in a variety of formats: Serial (RS-232), Ethernet (TCP/IP), and Contact Closures (I/O). All types of detection systems: Loop detectors, Video Detection Systems, and Radar/Microwave detectors are supported and currently deployed with ENCOM wireless systems.

Miscellaneous Signal Products/Devices: Sealant Loop (per gallon) price line 00093

Specifications are described in the NJDOT spec drawing EB-JS-1, which can be located on the NJDOT website at <http://www.state.nj.us/transportation/eng/elec/TSS/english/>

Miscellaneous Signal Products/Devices: Geometrically Programmed Louver, Plastic 12" indication (price line 00094)

Miscellaneous Signal Products/Devices: Mounting Adapter for Offset Luminaire (price line 00095)

Specifications for price lines 00094 and 00095 which can be found on the NJDOT website at: <http://www.state.nj.us/transportation/eng/elec/>

SPECIFICATIONS FOR A RED LED (LIGHT EMITTING DIODE) NAVIGATION LIGHT price lines 00096- 00097

N.J. Specification No. BME-RLED-NAV

Date: May 14, 2007

New Jersey Department of Transportation Specifications for a RED LED (Light Emitting Diode) Navigation Light.

The purpose of these specifications is to describe minimum acceptable requirements for a Red LED (Light Emitting Diode) Navigation Light.

GENERAL – 1

1-1 Red LED Navigation Lights shall conform to the following:

- A. Standards for U.S. Coast Guard Marine Signal Lanterns.
- B. Coast Guard standards for bridge lighting and other signals (Title 33, CFR, Part 118).
- C. IP-55 Standards

The manufacturer must supply certification or conformance which includes a copy of the test report by an independent technical laboratory as to the navigation lights compliance with Coast Guard Regulations.

CONSTRUCTION – 2

- 2-1 Each light shall consist of a fixture (Red LED Marine Lantern), internal assembly and mountings.
- 2-2 The lantern housing shall consist of heavy-duty, machined cast aluminum structural components and a precision molded, glass single-piece 8 inch (200mm) Fresnel lens.
- 2-3 The lantern shall be hinged for easy access to the internal assembly. Closure of the lantern shall be by captive toggle bolts and a watertight gasket.
- 2-4 The lantern shall have stainless steel lens protection rods (astragals) angled to minimize shadowing of the light beam at all viewing angles. Vertical lens rods are not acceptable.
- 2-5 The light must have sufficient candela output to provide a minimum of 2,000 yards (1829 m) range for the background lighting and atmospheric conditions in the vicinity of the bridge.
- 2-6 The cast aluminum base with side cable entry for mounting upright on fenders and piers, must mount on any flat surface. All joints must be waterproof utilizing neoprene gaskets. Bridge navigation lights must be fitted with shock and vibration mounts. Closure bolts and all attachment hardware must be stainless steel.
- 2-7 The light shall be at least 22 inches (559 mm) high and at least 9 inches (229 mm) in diameter. The weight of the light shall be at least 30 pounds (13.6 kg).

ELECTRICAL – 3

- 3-1 The LED navigation light shall connect directly to the line voltage, 120 volts nominal, and shall be able to operate over the voltage range of 108-130 volts AC.
- 3-2 The individual LED's shall be wired so that if one or more of the LED's fail, the navigation light shall remain visible (though at a lower intensity).
- 3-3 The LED's shall operate over the temperature range of -40°C to +74°C.
- 3-4 The LED life shall approach or exceed 100,000 hours.
- 3-5 Transient voltage suppression/protection shall be provided internal to the navigation light to minimize the possibility of damage due to extreme over voltage. Earth grounding provisions shall also be provided.
- 3-6 The lights will be used to mark bridge channel limits and must show a fixed red light through 180 degrees (towards approaching vehicles).
- 3-7 Navigation lights shall conform to RED chromacity standards for U.S. Coast Guard marine signal lanterns.

- 3-8 The LED's shall be symmetrically arranged around the lens focal point. The LED array shall be contained within a cylindrical diffuser to maximize horizontal uniformity of the light beam. LED array is to be mounted on an internal shock and vibration isolator assembly.
- 3-9 The LED navigation light shall consume no more than 10 watts.
- 3-10 The Light intensity must exceed 40 candelas.

INSTRUCTION AND GUARANTEES – 4

- 4-1 One schematic wiring diagram and installation manual shall be provided with each LED navigation light.
- 4-2 No changes or substitutions in these requirements will be accepted unless authorized in writing by the Director
- 4-3 The Red LED navigation lights shall be replaced or repaired if the beacon fails to function as intended due to workmanship material defects within the first sixty (60) months from the date of delivery.
- 4-4 The Red LED navigation lights which exhibit luminous intensities less than the minimum values specified in Coast Guard regulations within the first thirty-six (36) months from the date of delivery shall be replaced or repaired.

SPECIFICATIONS FOR A RED LED (LIGHT EMITTING DIODE)

OBSTRUCTION BEACON **price lines 00098 – 00099**

N.J. Specification No. BME-RLED-OB

Date: May 14, 2007

New Jersey Department of Transportation Specifications for a RED LED (Light Emitting Diode) L-864 Obstruction Beacon.

The purpose of these specifications is to describe minimum acceptable requirements for a Red LED (Light Emitting Diode) Obstruction Beacon.

GENERAL – 1

- 1-2 Red LED Obstruction Beacon shall conform to the following:

- D. FAA Requirements for L-864 Obstruction Beacons.
- E. Specification AC#150/5345-43E

The manufacturer must supply certification or conformance which includes a copy of the test report by an independent technical laboratory as to the beacon's compliance with FAA specifications. The obstruction beacon must be approved for listing in the advisory circular for "Airport Lighting Equipment Certification Program" issued by the Federal Aviation Administration.

CONSTRUCTION – 2

- 2-8 The beacons are designed for use as hazard warning beacons.
- 2-9 The lamp assembly and housing shall be weather and corrosion resistant.

- 2-10 The obstruction beacon shall have a self contained wiring compartment which eliminates the need for any additional boxes.
- 2-11 The base must mount on any flat surface. All joints must be waterproof. All metal parts must be of corrosion resistant materials and finish must meet FAA requirements.
- 2-12 The obstruction beacon shall have 4 ½" mounting holes (90° apart) on a 13" diameter bolt circle for mounting.
- 2-13 Color must meet color quality specifications of the FAA as well as military specification MIL-C-35050.

ELECTRICAL – 3

- 3-11 The LED obstruction beacon shall connect directly to the line voltage, 120 volts nominal, and shall be able to operate over the voltage range of 108-130 volts AC. The variation in line voltage shall not cause the light intensity to vary by more than 10% over the entire operating voltage range.
- 3-12 The obstruction beacon shall consume no more than 300 Watts.
- 3-13 The lamp shall operate at a minimum over the temperature range of -55°C to +55°C.
- 3-14 Transient voltage suppression/protection shall be provided internal to the obstruction beacon to minimize the possibility of damage due to extreme over voltage. Earth grounding provisions shall also be provided.
- 3-15 Beacons are to be controlled by a heavy duty flasher. Standard flash rate is 30 cycles per minute.

INSTRUCTION AND GUARANTEES – 4

- 4-1 One schematic wiring diagram and installation manual shall be provided with each LED obstruction beacon.
- 4-2 No changes or substitutions in these requirements will be accepted unless authorized in writing by the Director.
- 4-3 The Red LED obstruction beacon shall be replaced or repaired if the beacon fails to function as intended due to workmanship material defects within the first sixty (60) months from the date of delivery.
- 4-3 The Red LED obstruction beacons which exhibit luminous intensities less than the minimum values specified in FAA specifications within the first thirty-six (36) months from the date of delivery shall be replaced or repaired.

SPECIFICATIONS FOR TRAFFIC SIGNAL CABLE **price lines 00100 – 00104**

N.J. Specification No. BME-TS-CABLE

Date: July 1, 2008

The New Jersey Department of Transportation, Bureau of Maintenance Engineering Specification for Traffic Signal Cable.

It is the purpose of this specification to describe minimum acceptable design requirements for multi-conductor traffic signal cable.

TYPE A

GENERAL – 1

- 1-1 The Traffic Signal Cable shall consist of THHN/THWN conductors twisted and covered with a polyvinyl chloride outer jacket. The Traffic Signal Cable shall conform to UL subject 1277. The cable shall be rated for 600 volts.
- 1-2 The conductor shall be bare soft annealed copper wire, seven wire (Class B) stranding conforming to ASTM B 3 and B 8.
- 1-3 The insulation shall be high dielectric polyvinyl chloride covered with an insulation armor of nylon conforming to UL 83 for type THHN/THWN insulation. The insulated conductors shall be twisted and covered with helically applied suitable binding tape.
- 1-4 Circuit Identification: Insulation is colored and ink printed with conductor number and colors per ICEA S-66-524, Appendix K-Table K-1 Method 3.

<u>COND. No.</u>	<u>BASE COLOR</u>	<u>PRINTING</u>
1.	Black	1-Black
2.	White	2-White
3.	Red	3-Red
4.	Green	4-Green
5.	Orange	5-Orange
6.	Blue	6-Blue
7.	White	7-White-Black
8.	Red	8-Red-Black
9.	Green	9-Green-Black
10.	Orange	10-Orange-Black
11.	Blue	11-Blue-Black
12.	Black	12-Black-White
13.	Red	13-Red-White
14.	Green	14-Green-White

Surface Printing: Ink Printed, "14 AWG No. Conductors – THHN/THWN – NJDOT Approval number – Company name and number.

TYPE B

GENERAL – 1

- 1-1 The Traffic Signal Cable shall consist of XHHW conductors twisted and covered with a polyvinyl chloride outer jacket. The Traffic Signal Cable shall conform to UL subject 1277. The cable shall be rated for 600 volts.
- 1-2 The conductor shall be soft annealed copper wire; seven wire (Class B) stranding conforming to ASTM B 3 and B 8.
- 1-3 The insulation shall be cross-linked polyethylene conforming to UL Subject 44 for Type XHHW insulation. The insulated conductors shall be twisted and covered with helically applied suitable binding tape.

- 1-4 Circuit Identification: Insulation is colored and ink printed with conductor number and colors per ICEA S-66-524, Appendix K-Table K-1 Method 3.

<u>COND. No.</u>	<u>BASE COLOR</u>	<u>PRINTING</u>
1.	Black	1-Black
2.	White	2-White
3.	Red	3-Red
4.	Green	4-Green
5.	Orange	5-Orange
6.	Blue	6-Blue
7.	White	7-White-Black
8.	Red	8-Red-Black
9.	Green	9-Green-Black
10.	Orange	10-Orange-Black
11.	Blue	11-Blue-Black
12.	Black	12-Black-White
13.	Red	13-Red-White
14.	Green	14-Green-White

Surface Printing: Ink Printed, "14 AWG No. Conductors – THHN/THWN – NJDOT Approval number – Company name and number.

STATE BID PURCHASED MATERIAL

The following applies only to material procured through bid for direct State Purchase:

1. Only pre-approved cable with an EE number shall be allowed.
2. The bidder shall procure the following amount of cable and store at their facility;

A. 2/C	10,000 LF
B. 5/C	100,000 LF
C. 7/C	20,000 LF
D. 10/C	100,000 LF
E. 14/C	20,000 LF
3. The cable shall be supplied in 1,000 LF lengths on wooden reels.
4. As the State purchases the cable, that cable amount shall be deducted from the quantity amount.
5. At the end of the contract period the remaining cable shall be purchased by the State.
6. The price of the cable shall include storage and delivery charges. Delivery shall be as per 3.19 Shipping Instructions.
7. The bidder shall deliver all material within four (4) weeks of the vendor's receipt of a purchase order from the department of transportation.

3.4 PRICE LINE ITEM SPECIFICATION

The price line item provides the following information:

- 3.4.1 Item number
- 3.4.2 Item description
- 3.4.3 Drawing, specification or sketch number and/or manufacturer part/catalog number
- 3.4.4 Estimated annual usage
- 3.4.5 Minimum shipment-order quantity
- 3.4.6 Delivery schedule

3.5 PRODUCT QUALITY

Wherever a brand name is used, it is meant to denote the minimum acceptable level of quality and performance. Any item supplied as an "equal" must be approved by the Purchase Bureau and the Department Of Transportation.

3.6 PRODUCT INSPECTION

The State reserves the right to inspect the unit either at the contractor's facility or require that the unit be available for inspection at the agency delivery site. If, during inspection it becomes apparent that corrections or alterations must be made to the unit to comply with bid specifications, the contractor shall make all corrections prior to delivery and at no additional expense to the State.

3.7 DELIVERY CONDITIONS

The unit(s) is to be delivered to the New Jersey State agency as stated on page one (1) of the bid proposal.

The unit is to be completely assembled, serviced and ready for use upon delivery to the agency. Any parts, controls, materials or attachments, which are standard and/or necessary to form an efficient and complete working unit, as judged by the State, are to be furnished whether specifically mentioned herein or not.

The final inspection and acceptance of the unit will be at the using agency.

The contractor shall deliver the unit(s) to the agency between the hours of 8:00 a.m. and 3:30 p.m. on regularly scheduled agency workdays. Deliveries outside of these hours will not be accepted. The contractor must provide 24 hours notice (one work day) prior to delivery. (See shipping instructions, section 3.19 of the RFP).

3.8 MATERIAL PROTECTION

The contractor shall be required to protect all material so that it is delivered to the using agency in a first-class, undamaged condition. The State reserves the right to reject any material which is damaged or in an otherwise unacceptable condition. Any charges incurred due to unacceptable delivery will be the full responsibility of the contractor.

3.9 SHIPPING CHARGES

Unless otherwise specified, all bid items are to be quoted F.O.B. Destination to the address specified in this RFP. No additional charges for shipping or for split delivery will be accepted.

3.10 AVAILABILITY OF FUNDS

The State's obligation hereunder is contingent upon the availability of appropriated funds from which payment for contract purposes can be made. No legal liability on the part of the State for payment of any monies shall arise unless and until funds are made available each fiscal year to the Director of the Division of Purchase and Property.

3.11 INSTALLATION

No installation of any kind is required for this procurement.

3.12 INSTRUCTION OF AGENCY PERSONNEL

Complete instructions on the usage and maintenance of each unit and a demonstration on the operation of the unit shall be given by the contractor at the agency delivery site.

3.13 SERVICE/REPAIR MANUALS

Contractor is to furnish two (2) copies of all applicable parts, service and/or operator's manuals upon delivery of the equipment at no additional cost.

3.14 GUARANTEE

Manufacturer's standard warranty is to be for a minimum of one (1) year parts and labor from the time of delivery to and acceptance by the State. This guarantee shall apply to all equipment purchases. **Bidder should enclose a copy of its standard warranty with its bid proposal.**

3.15 QUANTITIES

Quantities listed are estimated annual usage by the Department of Transportation and minimum order quantities. The price line item description in the price sheets will indicate both of these quantities.

3.15.1 Estimated Annual Usage Quantities

Estimated quantities are based upon prior year's usage and are provided for informational purposes only. The State will not be limited to any minimum or maximum order on items containing estimated quantities and the State reserves the right to order that item in any quantity desired.

3.15.2 Minimum Shipment-Order Quantities

Minimum shipment-order quantities provide the vendor with a guaranteed minimum order quantity for shipment to a single site. The number in parenthesis following the estimated annual usage quantity on the item list is the minimum shipment quantity.

3.15.3 Guaranteed Annual Usage Quantities

The quantities for Traffic Signal Cable price lines 00100 – 00104 are guaranteed annual quantities as listed.

3.16 DELIVERY

Delivery schedule for each item shall be as indicated on the price line item description and must be in compliance with the following timeframes:

3.16.1 Price line items with a delivery schedule "A" designation - the vendor shall deliver all material within four (4) weeks of the vendor's receipt of a purchase order from the Department of Transportation.

3.16.2 Price line items with a delivery schedule "B" designation - the vendor shall deliver all material within eight (8) weeks of the vendor's receipt of a purchase order from the Department of Transportation.

3.16.3 Price line items with a delivery schedule "C" designation - the vendor shall deliver all materials within sixteen (16) weeks of the vendor's receipt of a purchase order from the Department of Transportation.

3.17 SPECIAL DELIVERY INSTRUCTIONS AND PENALTY

Failure to supply material within the specified delivery timeframes as stated above may result in the cancellation of the contractor's contract for that item. The contractor may be granted a three week extension of delivery if approved by requesting the extension in writing with adequate justification and sending this request to:

*New Jersey Department of Transportation
1035 Parkway Avenue
Trenton, NJ 08625
Attention: Mr. Dan Black*

If the contractor fails to deliver after the extension period, the department may recommend to the Director, that the contractor's contract be cancelled for that item.

The Director may then award a contract to the next lowest fully complying bidder for that item and bill the original contractor the difference in cost.

3.18 EQUIPMENT QUALITY

3.18.1 All equipment supplied must be new and of the latest design. It shall be of current manufacture, i.e., within the 12-month period preceding delivery. The model must be in current production. Discontinued models will not be accepted.

3.18.2 Each unit delivered shall be completely assembled, thoroughly serviced and ready for use when delivered to the using agency.

3.19 SHIPPING INSTRUCTIONS

The following sites are the delivery points for all material, ordered by the NJDOT.

Deliveries will only be accepted from 8:00am to 11:30am. Each yard (location) must be notified a minimum of one (1) day in advance for a delivery. Failure to follow these instructions could result in non-acceptance of the shipment from the vendor.

SHIPPING ADDRESSES

<u>REGION NORTH</u>	
Ship to:	
D.O.T. Stanhope Electrical Bureau Rd 2, Higlen Drive Stanhope, NJ 07874 Attention: Mr. Artemis Chavez Telephone: (973) 347-1901	D.O.T. Mt. Arlington Electrical 200 Stierle Court Mt. Arlington, NJ 07856-1322 Attention: Mr. Howard Donovan Telephone (973) 770-5062
D.O.T. Totowa Electrical 300 Minnisink Rd. Totowa, NJ 07512-1805 Attention: Mr. Ken Myers Telephone (973) 785-0556	D.O.T. Newark Electrical Bureau 602 Route 1 & 9 South Newark, NJ 07114 Attention: Mr. Ralph Lewis Telephone: (973) 648-2781

<u>REGION CENTRAL</u>	
Ship to:	
D.O.T. Regional Electrical Maintenance 999 Parkway Avenue - Building #20 Trenton, NJ 08625 Attention: Mr. Russell Belmont Telephone: (609)530-2280	D.O.T. Regional Electrical Maintenance 2436 Paynters Road House in Rear Manasquan, NJ 08736 Attention: Mr. Terry Quinn Telephone (732) 528-9393
<u>REGION SOUTH</u>	
Ship to:	
D.O.T. Regional Electrical Rear Building - 2nd Floor Route 70 & N.J. Turnpike Cherry Hill, NJ 08034 Attention: Mr. Edward Yaksta, Telephone (856) 795-4779	D.O.T. Electrical Maintenance 398 Egg Harbor Road Hammonton, NJ. 08037 Attention: Mr. Frank Platt Telephone (609) 561-1508

3.20 WARRANTY REQUIREMENTS

3.20.1 All units shall carry the standard warranty and/or guarantee. This warranty and/or guarantee shall accompany the unit when delivered.

3.20.2 On items requiring them, the contractor shall supply a complete shop repair manual, parts manual, service manual and operation's manual at time of delivery, at no additional cost. In addition, instructions for the operation of the unit shall be provided.

3.20.3 All repairs and replacements under the conditions stated above shall be at no charge for service and labor to the State of New Jersey.

3.20.4 If any item supplied fails to perform satisfactorily within the first 30 days, it shall be replaced by a new one of the same make and model. Temporary equipment shall be provided within 24 hours while replacement is being processed.

3.21 PAYMENT

Payment will only be made when all items ordered per P.O. are delivered: No partial payments will be made.

4.0 BID PROPOSAL PREPARATION AND SUBMISSION

4.1 GENERAL

The bidder is advised to thoroughly read and follow all instructions contained in this RFP, including the instructions on the RFP's signatory page, in preparing and submitting its bid proposal.

Note: Bid proposals shall not contain URLs (Uniform Resource Locators, i.e., the global address of documents and other resources on the world wide web) or web addresses. Inasmuch as the web contains dynamically changing content, inclusion of a URL or web address in a bid response is indicative of potentially changing information. Inclusion of a URL or web address in a bid response implies that the bid's content changes as the referenced web pages change.

4.2 BID PROPOSAL DELIVERY AND IDENTIFICATION

In order to be considered, a bid proposal must arrive at the Purchase Bureau in accordance with the instructions on the RFP signatory page

<http://www.state.nj.us/treasury/purchase/bid/summary/09x20188.shtml>. Bidders are cautioned to allow adequate delivery time to ensure timely delivery of bid proposals. **State regulation mandates that late bid proposals are ineligible for consideration. THE EXTERIOR OF ALL BID PROPOSAL PACKAGES ARE TO BE LABELED WITH THE BID IDENTIFICATION NUMBER AND THE FINAL BID OPENING DATE OR RISK NOT BEING RECEIVED IN TIME.**

4.3 NUMBER OF BID PROPOSAL COPIES

The bidder must submit **one (1) complete ORIGINAL bid proposal**, clearly marked as the "ORIGINAL" bid proposal. The bidder should submit two (2) **full, complete and exact copies** of the original. The copies requested are necessary in the evaluation of the bid proposal. A bidder failing to provide the requested number of copies will be charged the cost incurred by the State in producing the requested number of copies. It is suggested that the bidder make and retain a copy of its bid proposal.

A bidder failing to provide the requested number of copies will be charged the cost incurred by the State in producing the requested number of copies. It is suggested that the bidder make and retain a copy of its bid proposal.

4.4 BID PROPOSAL CONTENT

4.4.1 FORMS THAT MUST BE SUBMITTED WITH BID PROPOSAL

4.4.1.1 SIGNATORY PAGE

The bidder shall complete and submit the Signatory page provided on the Advertised Solicitation, Current Bid Opportunities webpage

<http://www.state.nj.us/treasury/purchase/bid/summary/09x20188.shtml>. The Signatory page shall be signed by an authorized representative of the bidder. If the bidder is a limited partnership, the Signatory page must be signed by a general partner. If the bidder is a joint venture, the Signatory page must be signed by a principal of each party to the joint venture. Failure to comply will result in rejection of the bid proposal.

4.4.1.2 OWNERSHIP DISCLOSURE FORM

In the event the bidder is a corporation, partnership or sole proprietorship, the bidder must complete the attached Ownership Disclosure Form. A current completed Ownership Disclosure Form must be received prior to or accompany the bid proposal. Failure to do so will preclude the award of a contract.

The Ownership Disclosure Form is located on the Advertised Solicitation, Current Bid Opportunities webpage <http://www.state.nj.us/treasury/purchase/bid/summary/09x20188.shtml>.

4.4.1.3 DISCLOSURE OF INVESTIGATIONS/ACTIONS INVOLVING BIDDER

The bidder shall provide a detailed description of any investigation, litigation, including administrative complaints or other administrative proceedings, involving any public sector clients during the past five years including the nature and status of the investigation, and, for any litigation, the caption of the action, a brief description of the action, the date of inception, current status, and, if applicable, disposition. The bidder shall use the Disclosure of Investigations and Actions Involving Bidder form located on the Advertised Solicitation, Current Bid Opportunities webpage <http://www.state.nj.us/treasury/purchase/bid/summary/09x20188.shtml>.

4.4.2 PROOFS OF REGISTRATION THAT MUST BE SUBMITTED WITH THE BID PROPOSAL

4.4.2.1 BUSINESS REGISTRATION CERTIFICATE FROM THE DIVISION OF REVENUE

FAILURE TO SUBMIT A COPY OF THE BIDDER'S BUSINESS REGISTRATION CERTIFICATE (OR INTERIM REGISTRATION) FROM THE DIVISION OF REVENUE WITH THE BID PROPOSAL MAY BE CAUSE FOR REJECTION OF THE BID PROPOSAL.

The bidder may go to www.nj.gov/njbgs to register with the New Jersey Division of Revenue or to obtain a copy of an existing Business Registration Certificate.

Refer to Section 1.1. of the NJ Standard Terms and Conditions version 07/27/07 located on the Advertised Solicitation, Current Bid Opportunities webpage <http://www.state.nj.us/treasury/purchase/bid/summary/09x20188.shtml>.

4.4.3 FORMS THAT MUST BE SUBMITTED BEFORE CONTRACT AWARD AND SHOULD BE SUBMITTED WITH THE BID PROPOSAL.

4.4.3.1 MACBRIDE PRINCIPLES CERTIFICATION

The bidder is required to complete the attached MacBride Principles Certification evidencing compliance with the MacBride Principles. The requirement is a precondition to entering into a State contract. The MacBride Principles Certification Form is located on the Advertised Solicitation, Current Bid Opportunities webpage: <http://www.state.nj.us/treasury/purchase/bid/summary/09x20188.shtml>.

4.4.3.2 AFFIRMATIVE ACTION

The bidder is required to submit a copy of Certificate of Employee Information or a copy of Federal Letter of Approval verifying that the bidder is operating under a federally approved or sanctioned Affirmative Action program. If the bidder has neither document of Affirmative Action evidence, then the bidder must complete the attached Affirmative Action Employee Information Report (AA-302). This requirement is a precondition to entering into a State contract. The

Affirmative Action Employee Information Report (AA-302) is located on the Advertised Solicitation, Current Bid Opportunities webpage:
<http://www.state.nj.us/treasury/purchase/bid/summary/09x20188.shtml>.

4.4.4 SUBMITTALS

4.4.4.1 MANUFACTURER'S CATALOG/MODEL NUMBERS & CATALOG CUTS

For each item bid, the bidder should provide the manufacturer's name and catalog or model number. If the item bid is on the NJDOT Bureau of Electrical Engineering's current approved material listing, the bidder should list the EE number. If the item is not on this list than the bidder should supply either a catalog cut or drawing for each item bid. It is strongly suggested that all information requested be provided at the time of bid submission. If the bidder does not supply the information outlined in this paragraph, the bidder will have five (5) working days after written request from the State to supply any information required for the evaluation of the bid proposal. Failure to supply the above information within the above timeframe will result in the rejection of the bidder's bid proposal for the affected item. If the affected item is part of Section E, the rejection of one or more items will result in the rejection of the entire section (Group Lines 00050 - 00060). All applicable information is to be provided on each of the line items found on the pricing pages.

4.4.4.2 SUBMISSION OF LITERATURE

If the bidder is supplying alternate brands of material or equipment to that specified in the RFP it is strongly suggested that it submit complete specification literature with the bid proposal. If specification literature is not supplied, it must be provided within five (5) working days after written request from the State. Failure to provide complete specifications in this timeframe for any alternates proposed will make it impossible for the State to evaluate your bid and will result in bid rejection.

4.4.4.3 BIDDER EXPERIENCE - DATA SHEETS

The bidder must provide all of the information requested in the Bidder's Data Packet located on the Advertised Solicitation, Current Bid Opportunities webpage:
<http://www.state.nj.us/treasury/purchase/bid/summary/09x20188.shtml>.

4.4.4.4 SAMPLES/SAMPLE TESTING

The samples submitted must meet the specification requirements set forth in the RFP and must be representative of the product bid. Bid samples **for pricing lines 00001 through 00104** for evaluation and testing purposes are to be made available at no charge and delivered to Department of Transportation, at the bidder's expense. The bidder must deliver samples within **seven (7) working days** following a request from the State, **except for pricing line 00072. Pricing line 00072 shall be delivered within one (1) month from the bid date; the manufacturer/representatives of the low bid shall deliver a complete and fully functional assembly, in compliance with these specifications, at the bidder's expense for inspection and testing before acceptance and award of this contract item.** Bid samples will be returned. The Department of Transportation will conduct laboratory tests to assure that the bid samples submitted **for pricing lines 00001 - 00104** conform to this RFP. The State reserves the right to perform any tests necessary to assure that the bid samples conform to this RFP **for pricing lines 00001 – 00104**. The testing results of the State are final.

4.4.5 FINANCIAL CAPABILITY OF THE BIDDER

Upon request, In order to provide the State with the ability to judge the bidder's financial capacity and capabilities to undertake and successfully complete the contract, the bidder should submit two years of certified financial statements that include a balance sheet, income statement and statement of cash flow, and all applicable notes for the most recent calendar year or the bidder's most recent fiscal year. If certified financial statements are not available, the bidder should provide either a reviewed or compiled statement from an independent accountant setting forth the same information required for the certified financial statements, together with a certification from the Chief Executive Officer and the Chief Financial Officer, that the financial statements and other information included in the statements fairly present in all material respects the financial condition, results of operations and cash flows of the bidder as of, and for, the periods presented in the statements. In addition, the bidder should submit a bank reference.

If the information is not supplied with the bid proposal, the State may still require the bidder to submit it. If the bidder fails to comply with the request within seven (7) business days, the State may deem the proposal non-responsive.

The bidder may designate specific financial information as not subject to disclosure when the bidder has a good faith legal/factual basis for such assertion. The bidder may submit specific financial documents in a separate, sealed package clearly marked "Confidential-Financial Information" along with its Bid Proposal.

The State reserves the right to make the determination whether to accept the bidder's assertion of confidentiality and will advise the bidder accordingly.

4.4.6 PRICING

The bidder must submit its pricing using the format set forth in the State supplied price sheet(s) attached to this RFP. Failure to submit all information required will result in the bid being considered non-responsive. Each bidder is required to hold its prices firm through issuance of contract.

4.4.7 COOPERATIVE PURCHASING

The bidder should complete the attached Cooperative Purchasing Form indicating willingness or unwillingness to extend State contract pricing and terms to Cooperative Purchasing partners

4.4.8 PRICING SHEET INSTRUCTIONS

4.4.7.1 Price line items 00001 through 00049 and 00063 through 00093 will be awarded on an individual line item basis. Bidders need not bid all price line items in order to be considered for award.

4.4.7.2 Price line items 00050 through 00062 and price lines 00100 – 00104 will be awarded as a group to a single vendor. Bidders must bid all line items with each group in order to be considered for award. Failure to do so will result in rejection of your bid proposal for the price lines for that group only.

5.0 SPECIAL CONTRACTUAL TERMS AND CONDITIONS

5.1 PRECEDENCE OF SPECIAL CONTRACTUAL TERMS AND CONDITIONS

The contract awarded as a result of this RFP shall consist of this RFP, addendum to this RFP, the contractor's bid proposal and the Division's Notice of Award.

Unless specifically stated within this RFP, the Special Contractual Terms and Conditions of the RFP take precedence over the NJ Standard Terms and Conditions version 07/27/07 located on the Advertised Solicitation, Current Bid Opportunities webpage:
<http://www.state.nj.us/treasury/purchase/bid/summary/09x20188.shtml>.

In the event of a conflict between the provisions of this RFP, including the Special Contractual Terms and the NJ Standard Terms and Conditions version 07/27/07, and any Addendum to this RFP, the Addendum shall govern.

In the event of a conflict between the provisions of this RFP, including any Addendum to this RFP, and the bidder's bid proposal, the RFP and/or the Addendum shall govern.

5.2 CONTRACT TERM AND EXTENSION OPTION

The term of the contract shall be for a period of one (1) year. The anticipated "Contract Effective Date" is provided on the signatory page of this RFP: <http://www.state.nj.us/treasury/purchase/bid/summary/09x20188.shtml>. If delays in the procurement process result in a change to the anticipated Contract Effective Date, the bidder agrees to accept a contract for the full term of the contract. The contract may be extended for all or part of **two (2)**, one-year periods, by the mutual written consent of the contractor and the Director. **Purchase orders may be placed against the contract up to and including the end of business on the last day of the contract, for delivery no more than 45 days after contract expiration.**

5.3 CONTRACT TRANSITION

In the event that a new contract has not been awarded prior to the contract expiration date, as may be extended herein, it shall be incumbent upon the contractor to continue the contract under the same terms and conditions until a new contract can be completely operational. At no time shall this transition period extend more than ninety (90) days beyond the expiration date of the contract.

5.4 CONTRACT AMENDMENT

Any changes or modifications to the terms of the contract shall be valid only when they have been reduced to writing and signed by the contractor and the Director.

5.5 CONTRACTOR'S WARRANTY

- a) The Contractor is responsible for the quality, technical accuracy, timely completion and delivery of all deliverables and other services to be furnished by the Contractor under the Contract. The Contractor agrees to perform in a good, skillful and timely manner all services set forth in the Contract.
- b) The Contractor shall, without additional compensation, correct or revise any errors, omissions, or other deficiencies in its services and deliverables furnished under the Contract. The approval of interim deliverables furnished under the Contract shall not in any way relieve the Contractor of fulfilling all of its obligations under the Contract. The

acceptance or payment for any of the services rendered under the Contract shall not be construed as a waiver by the State or Agency, of any rights under the agreement or of any cause of action arising out of the Contractor's performance of the Contract.

- c) The acceptance of, approval of or payment for any of the services performed by the Contractor under the Contract shall not constitute a release or waiver of any claim the State or Agency, has or may have for latent defects or errors or other breaches of warranty or negligence.

5.6 ITEMS ORDERED AND DELIVERED

The **Using Agency** is authorized to order and **the contractors** are authorized to ship only those items covered by the contracts resulting from this RFP. If a review of orders placed by the Using Agency reveals that material other than that covered by the contract has been ordered and delivered, such delivery shall be a violation of the terms of the contract and may be considered by the Director as a basis to terminate the contract and/or as a basis not to award the contractor a subsequent contract. The Director may take such steps as are necessary to have the items returned by the Agency, regardless of the time between the date of delivery and discovery of the violation. In such event, the contractor shall reimburse the State the full purchase price.

The contract involves items which are necessary for the continuation of ongoing critical State services. Any delay in delivery of these items would disrupt State services and would force the State to immediately seek alternative sources of supply on an emergency basis. Timely delivery is critical to meeting the State's ongoing needs.

5.7 REMEDIES FOR FAILURE TO COMPLY WITH MATERIAL CONTRACT REQUIREMENTS

In the event that the contractor fails to comply with any material contract requirements, the Director may take steps to terminate the contract in accordance with the State administrative code and/or authorize the delivery of contract items by any available means, with the difference between the price paid and the defaulting contractor's price either being deducted from any monies due the defaulting contractor or being an obligation owed the State by the defaulting contractor.

5.8 MANUFACTURING/PACKAGING REQUIREMENTS

5.8.1 All products must conform in every respect to the standards and regulations established by Federal and New Jersey State laws.

5.8.2 All products shall be manufactured and packaged under modern sanitary conditions in accordance with federal and state law and standard industry practice.

5.8.3 All products are to be packaged in sizes as specified in this RFP and shall be packaged in such a manner as to ensure delivery in first class condition and properly marked for identification. All shipments must be comprised of original cartons associated with the commercial industry represented by the actual product contained within each carton. Deliveries containing re-used, re-labeled, re-worked or alternate cartons are subject to rejection by the Using Agency at the contractor's expense.

5.9 CLAIMS

All claims asserted against the State by the contractor shall be subject to the New Jersey Tort Claims Act, N.J.S.A. 59:1-1.1, et seq., and/or the New Jersey Contractual Liability Act, N.J.S.A. 59:13-1, et seq.

5.10 CONTRACT ACTIVITY REPORT

In conjunction with the standard record keeping requirements of this contract, as required by in paragraph 3.19 of the NJ Standard Terms and Conditions version 07/27/07, located on the Advertised Solicitation, Current Bid Opportunities webpage

<http://www.state.nj.us/treasury/purchase/bid/summary/09x20188.shtml>, contractor(s) must provide, on a calendar quarter basis, to the Purchase Bureau buyer assigned, a record of all purchases made under their contract award resulting for this Request for Proposal. This includes purchases made by all using agencies including the State and political sub-divisions thereof. This reporting requirement includes sales to State using agencies and, if permitted under the terms of the contract, sales to counties, municipalities, school districts, volunteer fire departments, first aid squads and rescue squads, and independent institutions of higher education. The requirement also includes sales to State and County Colleges and Quasi-State Agencies. Quasi-State Agencies include any agency, commission, board, authority or other such governmental entity which is established and is allocated to a State department or any bi-state governmental entity of which the State of New Jersey is a member.

This information must be provided in a tabular format such that an analysis can be made to determine the following:

- Contractor's total sales volume to each purchaser under the contract, subtotaled by product, including, if applicable, catalog number and description, price list with appropriate page reference and/or contract discount applied.
- Total dollars paid to subcontractors.

Submission of purchase orders, confirmations, and/or invoices do not fulfill this contract requirement for information.

Contractors are strongly encouraged to submit the required information in electronic spreadsheet format. The Purchase Bureau uses Microsoft Excel.

Failure to report this mandated information will be a factor in future award decisions.

5.11 PUBLIC WORKS CONTRACT-ADDITIONAL AFFIRMATIVE ACTION REQUIREMENT

N.J.S.A. 10:5-33 requires that:

"During the performance of this contract, the contractor agrees as follows:

a) The contractor or subcontractor, where applicable, will not discriminate against any employee or applicant for employment because of age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex. Except with respect to affectional or sexual orientation and gender identity or expression, the contractor will take affirmative action to ensure that such applicants are recruited and employed, and that employees are treated during employment, without regard to their age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex. Such action shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the contracting officer setting forth the provisions of this nondiscrimination clause;

b) The contractor or subcontractor, where applicable will, in all solicitations or advertisements for

employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex;

c) The contractor or subcontractor where applicable, will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice, to be provided by the agency contracting officer, advising the labor union or workers' representative of the contractor's commitments under this act and shall post copies of the notice in conspicuous places available to employees and applicants for employment."

6.0 PROPOSAL EVALUATION

6.1 EVALUATION CRITERIA

The following criteria will be used to evaluate all bid proposals that meet the requirements of this RFP. The criteria are not necessarily listed in order of importance:

6.1.1 Price

6.1.2 Experience of the bidder

6.1.3 The bidder's past performance under similar contracts, including if applicable, the Division's vendor performance database.

6.2 ORAL PRESENTATION AND/OR CLARIFICATION OF BID PROPOSAL

After the submission of bid proposals, unless requested by the State as noted below, vendor contact with the State is still not permitted.

The bidder may be required to give an oral presentation to the State concerning its bid proposal. The State may also require the bidder to submit written responses to questions regarding its bid proposal.

The purpose of such communication with the bidder, either through an oral presentation or a letter of clarification, is to provide an opportunity for the bidder to clarify or elaborate on its bid proposal. Original bid proposals submitted, however, cannot be supplemented, changed, or corrected in any way. No comments regarding other bid proposals are permitted. Bidders may not attend presentations made by their competitors.

It is within the State's discretion whether to require the bidder to give an oral presentation or require the bidder to submit written responses to questions regarding its bid proposal. Action by the State in this regard should not be construed to imply acceptance or rejection of a bid proposal. The Purchase Bureau buyer will be the sole point of contact regarding any request for an oral presentation or clarification.

6.3 BID DISCREPANCIES

In evaluating bids:

- Discrepancies between words and figures will be resolved in favor of words.
- Discrepancies between unit prices and totals of unit prices will be resolved in favor of unit prices.
- Discrepancies in the multiplication of units of work and unit prices will be resolved in favor of the unit prices.
- Discrepancies between the indicated total of multiplied unit prices and units of work and the actual total will be resolved in favor of the actual total.
- Discrepancies between the indicated sum of any column of figures and the correct sum thereof will be resolved in favor of the corrected sum of the column of figures.

7.0 CONTRACT AWARD

7.1 DOCUMENTS REQUIRED BEFORE CONTRACT AWARD

7.1.1 REQUIREMENTS OF N.J.S.A. 19:44A-20.13-25 (FORMERLY EXECUTIVE ORDER 134)

In order to safeguard the integrity of State government procurement by imposing restrictions to insulate the negotiation and award of State contracts from political contributions that pose the risk of improper influence, purchase of access, or the appearance thereof, the Legislature enacted N.J.S.A. 19:44A-20.13 – 25 on March 22, 2005 the “Legislation”), retroactive to October 15, 2004, superseding the terms of Executive Order 134. Pursuant to the requirements of the Legislation, the terms and conditions set forth in this section are material terms of any contract resulting from this RFP:

7.1.1.1 DEFINITIONS

For the purpose of this section, the following shall be defined as follows:

a) Contribution – means a contribution reportable as a recipient under “The New Jersey Campaign Contributions and Expenditures Reporting Act.” P.L. 1973, c. 83 (C.19:44A-1 et seq.), and implementing regulations set forth at N.J.A.C. 19:25-7 and N.J.A.C. 19:25-10.1 et seq. Through December 31, 2004, contributions in excess of \$400 during a reporting period were deemed "reportable" under these laws. As of January 1, 2005, that threshold was reduced to contributions in excess of \$300.

b) Business Entity – means any natural or legal person, business corporation, professional services corporation, Limited Liability Company, partnership, limited partnership, business trust, association or any other legal commercial entity organized under the laws of New Jersey or any other state or foreign jurisdiction. The definition of a business entity includes (i)all principals who own or control more than 10 percent of the profits or assets of a business entity or 10 percent of the stock in the case of a business entity that is a corporation for profit, as appropriate; (ii)any subsidiaries directly or indirectly controlled by the business entity; (iii)any political organization organized under section 527 of the Internal Revenue Code that is directly or indirectly controlled by the business entity, other than a candidate committee, election fund, or political party committee; and (iv)if a business entity is a natural person, that person’s spouse or child, residing in the same household.

7.1.1.2 BREACH OF TERMS OF THE LEGISLATION

It shall be a breach of the terms of the contract for the Business Entity to (i)make or solicit a contribution in violation of the Legislation, (ii)knowingly conceal or misrepresent a contribution given or received; (iii)make or solicit contributions through intermediaries for the purpose of concealing or misrepresenting the source of the contribution; (iv)make or solicit any contribution on the condition or with the agreement that it will be contributed to a campaign committee or any candidate of holder of the public office of Governor, or to any State or county party committee; (v)engage or employ a lobbyist or consultant with the intent or understanding that such lobbyist or consultant would make or solicit any contribution, which if made or solicited by the business entity itself, would subject that entity to the restrictions of the Legislation; (vi)fund contributions made by third parties, including consultants, attorneys, family members, and employees; (vii)engage in any exchange of contributions to circumvent the intent of the Legislation; or (viii)directly or indirectly through or by any other person or means, do any act which would subject that entity to the restrictions of the Legislation.

7.1.1.3 CERTIFICATION AND DISCLOSURE REQUIREMENTS

a) The State shall not enter into a contract to procure from any Business Entity services or any material, supplies or equipment, or to acquire, sell or lease any land or building, where the value of the transaction exceeds \$17,500, if that Business Entity has solicited or made any contribution of money, or pledge of contribution, including in-kind contributions to a candidate committee and/or election fund of any candidate for or holder of the public office of Governor, or to any State or county political party committee during certain specified time periods

b) Prior to awarding any contract or agreement to any Business Entity, the Business Entity proposed as the intended awardee of the contract shall submit the Certification and Disclosure form, certifying that no contributions prohibited by the Legislation have been made by the Business Entity and reporting all contributions the Business Entity made during the preceding four years to any political organization organized under 26 U.S.C.527 of the Internal Revenue Code that also meets the definition of a "continuing political committee" within the mean of N.J.S.A. 19:44A-3(n) and N.J.A.C. 19:25-1.7. The required form and instructions, available for review on the Purchase Bureau website at <http://www.state.nj.us/treasury/purchase/forms.htm#eo134>, shall be provided to the intended awardee for completion and submission to the Purchase Bureau with the Notice of Intent to Award. Upon receipt of a Notice of Intent to Award a Contract, the intended awardee shall submit to the Division, in care of the Purchase Bureau Buyer, the Certification and Disclosure(s) within five (5) business days of the State's request. Failure to submit the required forms will preclude award of a contract under this RFP, as well as future contract opportunities.

c) Further, the Contractor is required, on a continuing basis, to report any contributions it makes during the term of the contract, and any extension(s) thereof, at the time any such contribution is made. The required form and instructions, available for review on the Purchase Bureau website at <http://www.state.nj.us/treasury/purchase/forms.htm#eo134>, shall be provided to the intended awardee with the Notice of Intent to Award.

7.1.1.4 STATE TREASURER REVIEW

The State Treasurer or his designee shall review the Disclosures submitted pursuant to this section, as well as any other pertinent information concerning the contributions or reports thereof by the intended awardee, prior to award, or during the term of the contract, by the contractor. If the State Treasurer determines that any contribution or action by the contractor constitutes a breach of contract that poses a conflict of interest in the awarding of the contract under this solicitation, the State Treasurer shall disqualify the Business Entity from award of such contract.

7.1.1.5 ADDITIONAL DISCLOSURE REQUIREMENT OF P.L. 2005, C. 271

Contractor is advised of its responsibility to file an annual disclosure statement on political contributions with the New Jersey Election Law Enforcement Commission (ELEC), pursuant to P.L. 2005, c. 271, section 3 if the contractor receives contracts in excess of \$50,000 from a public entity in a calendar year. It is the contractor's responsibility to determine if filing is necessary. Failure to so file can result in the imposition of financial penalties by ELEC. Additional information about this requirement is available from ELEC at 888-313-3532 or at www.elec.state.nj.us.

7.2 FINAL CONTRACT AWARD

7.2.1 For price line items 00001 through 00049 and 00063 through 00099 a single award shall be made **per line item** with reasonable promptness by written notice to that responsible bidder whose bid, conforming to the invitation for bids, will be most advantageous to the State, price and

other factors considered. Any or all bids may be rejected when the State Treasurer or the Director of the Division of Purchase and Property determines that it is in the public interest so to do.

7.2.2 A single **group** award shall be made to the overall low bidder for all items in the group, for group line items 00050 through 00062 and group line items 100 through 104 with reasonable promptness by written notice to that responsible bidder whose bid, conforming to the invitation for bids, will be most advantageous to the State, price and other factors considered. Any or all bids may be rejected when the State Treasurer or the Director of the Division of Purchase and Property determines that it is in the public interest so to do.

7.3 INSURANCE CERTIFICATES

The contractor shall provide the State with current certificates of insurance for all coverages required by the terms of this contract, naming the State as an Additional Insured.

8.0 CONTRACT ADMINISTRATION

8.1 CONTRACT MANAGER

The State Contract Manager is the State employee responsible for the overall management and administration of the contract.

The State Contract Manager for this project will be identified at the time of execution of contract. At that time, the contractor will be provided with the State Contract Manager's name, department, division, agency, address, telephone number, fax phone number, and email address.

8.1.1 STATE CONTRACT MANAGER RESPONSIBILITIES

For an agency contract where only one State office uses the contract, the State Contract Manager will be responsible for engaging the contractor, assuring that Purchase Orders are issued to the contractor, directing the contractor to perform the work of the contract, approving the deliverables and approving payment vouchers. The State Contract Manager is the person that the contractor will contact **after the contract is executed** for answers to any questions and concerns about any aspect of the contract. The State Contract Manager is responsible for coordinating the use and resolving minor disputes between the contractor and any component part of the State Contract Manager's Department.

If the contract has multiple users, then the State Contract Manager shall be the central coordinator of the use of the contract for all Using Agencies, while other State employees engage and pay the contractor. All persons and agencies that use the contract must notify and coordinate the use of the contract with the State Contract Manager.

8.1.2 COORDINATION WITH THE STATE CONTRACT MANAGER

Any contract user that is unable to resolve disputes with a contractor shall refer those disputes to the State Contract Manager for resolution. Any questions related to performance of the work of the contract by contract users shall be directed to the State Contract Manager. The contractor may contact the State Contract Manager if the contractor can not resolve a dispute with contract users.